



Tying Hair Wing Dry Flies

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Objectives

Participating young people and adults will:

1. Practice techniques for applying hair wings and tails
2. Practice forming wings on downwing patterns
3. Practice forming spun hair or folded hair bodies
4. Explore additional hairwing patterns
5. Have fun while learning

Youth Development Objectives

Participating young people will develop:

1. Enhanced hand-eye coordination
2. Ability to work sequentially and plan ahead
3. Enhanced confidence and self awareness
4. Ability to follow directions and patterns
5. Enhanced communication skills

Roles for Teen and Junior Leaders

1. Demonstrate and explain tying techniques and steps
2. Assist participants as needed
3. Assist with set up and clean up of teaching site
4. Share tying experiences and tricks
5. Evaluate flies to assist in improvement
6. Encourage young people as they learn tying skills

Potential Parental Involvement

1. See "Roles for Teen and Junior Leaders" above
2. Arrange for or provide teaching location
3. Arrange for or provide materials or equipment
4. Arrange for or provide transportation
5. Arrange for or provide refreshments

Best Time: After reasonable skill with other winged dry flies has developed

Best Location: Well lighted, comfortable setting

Time Required: Approximately 1 hour

Equipment/Materials

tying vise hackle pliers
 tying bobbin bobbin thread
 dubbing needle head cement
 6/0 tying thread (black, red, amber, primrose)
 dry fly hooks (like Mustad 94840)
 woodchuck guard hair or natural bucktail
 white mink tail, kip tail or bucktail
 peacock herl scarlet floss
 coachman brown hackles
 woodchuck leg guard hair or pale bucktail
 brown kip tail or bucktail
 hares mask or gray brown fox dubbing
 grizzly hackle white or cream fur
 badger hackle

Evaluation Activities/Suggestions

1. Observe interactions with other participants
2. Observe improvements in tying skill
3. Observe fidelity to patterns or models shown

Safety Considerations

No special safety considerations are involved.

References

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6. Discuss personal experience in fishing hair wings

See references in introduction

Lesson Outline

Presentation	Application
<p>I. Hairwing dry flies</p> <p>A. Basic pattern elements</p> <ol style="list-style-type: none">1. Same as basic dry flies2. Wings and tails of hair<ol style="list-style-type: none">a. Deer hairb. Kip or impali (calf tail) hairc. Mink, fitch or ferret taild. Bear haire. Woodchuck guard hair3. Heavy hackles and bodies <p>B. Utility of these patterns</p> <ol style="list-style-type: none">1. Buggy searching patterns2. Brawly, turbulent water	<p>Using a large hairwing dry fly or several of them, POINT OUT the basic pattern elements and DISCUSS the differences between classic dry flies and hairwing dry flies. NOTE that the basic tying procedures are the same, but there are differences in the materials used and the handling of those materials.</p> <p>PASS AROUND samples of the various materials used for wings and tailing.</p>
<p>II. Wulff patterns</p> <p>A. Royal Wulff</p> <ol style="list-style-type: none">1. Materials<ol style="list-style-type: none">a. Extra fine to heavy hooksb. 6/0 black threadc. Brown hair tail<ol style="list-style-type: none">1) Woodchuck guard hair tail2) Deer tail hair (original)3) Brown calf tail4) Brown mink or weasel taild. Three-part body<ol style="list-style-type: none">1) Peacock herl2) Scarlet floss3) Peacock herle. White hair wings<ol style="list-style-type: none">1) Deer belly hair2) White bucktail3) Kip or calf4) Polar bearf. Coachman brown hackle2. Tying procedure<ol style="list-style-type: none">a. Bind in and set wingsb. Divide wings with figure 8 wrapc. Trim wing butts at angled. Bind in taile. Trim tail at wing buttsf. Apply body materials<ol style="list-style-type: none">1) Equal thirds2) Peacock herl at butt3) Scarlet floss center <p>4) Peacock herl shoulder</p> <p>Attach and wind hackles</p> <ol style="list-style-type: none">h. Whip finishI. Apply head cement	<p>Briefly DISCUSS some of the applications where hairwing dry flies are useful.</p> <p>NOTE that Wulff patterns are so named because they were developed by Lee and Joan Wulff.</p>
	<p>PASS OUT and DISCUSS the materials used in tying the Royal Wulff.</p>
	<p>EXPLAIN material use while tying a demonstration fly. LEAVE the fly in the vise to be used as a model for comparison with youth tied flies.</p>
	<p>DEMONSTRATE trimming the wing and tail butts to form a smooth base for the body materials.</p>
	<p>EMPHASIZE keeping the rather heavily applied body in equal thirds.</p>
	<p>REINFORCE the need to tie a neat, smooth and compact head as evidence of care in tying the fly.</p>
<p>B. Grizzly Wulff</p> <ol style="list-style-type: none">1. Materials<ol style="list-style-type: none">a. Thread - amber or dull orange	

- b. Wing
 - 1) Brown deer hair
 - 2) Brown kip tail
 - 3) Mink or fitch tail
- c. Tail
 - 1) Woodchuck leg hair
 - 2) Brown deer hair
 - 3) Mink tail
- d. Body
 - 1) Hare's ear fur
 - 2) Grayish tan fox fur
- e. Hackle - mixed
 - 1) Red grizzly
 - 2) Grizzly
- 2. Tying procedure
 - a. Attach and split wings
 - b. Attach tail
 - c. Dub and wind body
 - d. Prepare and wind hackles
 - e. Wind and whip finish head
 - f. Apply head cement
- C. Other Wulff patterns
 - 1. White Wulff
 - a. Materials
 - 1) Thread - white or primrose
 - 2) Wing
 - a) White deer belly hair
 - b) White kip tail
 - c) White weasel or mink tail
 - d) Polar bear hair
 - 3) Tail - same as wing
 - 4) Body - white or cream fur
 - 5) Hackle - pale badger
 - b. Tying procedure
 - 1) Similar to above patterns
 - 2) Rough white or cream fur
 - 2. Gray Wulff
 - a. Thread - gray or black
 - b. Wings - brown hair as above
 - c. Tail - brown hair as above
 - d. Body - gray fox or muskrat dubbing
 - e. Hackle - medium blue done
 - 3. Ausable Wulff
 - a. Thread - amber, orange or black
 - b. Wings - white hair as above
 - c. Tail - woodchuck guard hair (legs preferred)
 - d. Body - pale brown-amber dubbing
 - e. Hackle - mixed brown and grizzly
 - 4. Black Wulff
 - a. Thread - black
 - b. Wings - dark brown or black
 - c. Tail - dark brown or black
 - d. Body - pink or pale white dubbing
 - e. Hackle - black

If desired, **LEAD** participants in tying one or more of the other Wulff patterns useful in your area.

III. Humpies and Irresistibles

A. Irresistible

1. Materials

- a. Thread - black or amber
- b. Wings - brown deer hair or calf tail
- c. Tail - brown deer hair or calf tail
- d. Body - clipped spun hair
 - 1) Fine deer body hair
 - 2) Caribou hair
- e. Hackle - dark rusty dun

2. Tying procedure

- a. Tie in the tail materials and trim butts
- b. Spin a tight, compact hair body
- c. Trim body to a tapered cylinder
- d. Prepare and tie in hackle point wings
- f. Stand up and separate wings
- g. Apply hackles
- h. Wind and whip finish head

3. Variations

- a. Yellow irresistible
 - 1) Spun yellow deer hair body
 - 2) Red hackle fiber or hair tail
 - 3) Brown hackles
- c. Rat-faced McDougal
 - 1) Wings - grizzly hackle tips
 - 2) Tail - ginger hackle fibers
 - 3) Body - clipped, spun deer hair or caribou
 - 4) Hackles - ginger
 - 5) Hairwing version
 - a) White deer or calf tail wings
 - b) Tail - woodchuck leg hairs

B. Humpies

1. General structure

- a. Deer hair tail
- b. Underbody of colored tying thread
- c. Deer hair overbody and wings
- d. Hackles of choice

2. Materials

- a. Fine, dark deer body hair
- b. Tying thread to match pattern color
- c. Hackles of choice

2. Tying procedure

- a. Tie in a generous tail of fine deer hair
- b. Measure and bind in body and wing wings
 - 1) Measure tips to allow length for
 - 2) Bind in with tips to the rear
- c. Wind thread underbody
 - 1) Wind evenly over body hair butts
 - 2) Trim hair butts at wing base
 - 3) Finish underbody at wing base
- d. Pull wing/body hair forward and bind in
- e. Stand up wings, divide (figure 8 wrap)

PASS OUT and **DESCRIBE** materials for tying an Irresistible or Rat-faced McDougal.

NOTE that caribou hair ties a very tight and dense body, but that very fine, light deer hair (e.g. belly or lower leg hair) ties very acceptable bodies as well.

DEMONSTRATE tying an Irresistible while explaining the procedure. **LEAVE** the finished fly in the vise as a model for the youngsters as they tie their own.

If desired, **TIE** an additional clipped hair bodied fly.

If desired, **DEMONSTRATE** an additional pattern using hair wings and tail. **NOTE** that this type of fly is more durable than those using hackle tails and hackle point wings.

DEMONSTRATE a selected Humpy pattern, leaving the fly in the vise while the participants tie their own.

TIE in a shank-length tail, evening the tail tips. **PLACE** a slip of plastic over the tail, and **BIND IN** the overbody hair, leaving adequate hair to form the wings after the hair body is folded forward. **WIND** forward over the bases of the body hair to the base of the wing area, forming a tightly wound thread underbody.

WIND several wraps of thread over the wing area, and **LIFT** the wings into place, binding them upright and using a figure-8 wrap to form split wings.

- f. Bind in and apply hackles
- g. Wind head and whip finish
- 3. Variations
 - a. Red Humpy
 - 1) Red tying thread
 - 2) Coachman and grizzly hackles
 - b. Yellow Humpy
 - 1) Yellow tying thread
 - 2) Brown hackle

IV. Trudes - downwing/streamer hybrid

A. Materials

- 1. Hook - dry fly x to 2x long
- 2. Thread to match body color
- 3. Tail - hair or hackle fibers
- 4. Body - dubbing or floss
- 5. Wing - white kip or calf body hair
- 6. Hackle - dry fly, matching pattern

B. Tying procedures

- 1. Attach thread at bend of hook
- 2. Prepare and bind in tail fibers
- 3. Bind in and apply body materials

4. Bind in wing at shoulder

- a. Reaching to end of tail
- b. Downwing style

5. Hackle as a collar

6. Head of tying thread

C. Variations

- 1. Royal Trude
 - a. Hook - dry fly #8-16
 - b. Thread - black 6/0
 - c. Tail - golden pheasant tippet
 - d. Body - peacock herl, scarlet floss, herl
 - e. Wing - white kip tail or calf body hair
 - f. Hackle - coachman brown
- 2. Lime Trude
 - a. Tail - lime hackle fibers
 - b. Body - lime dubbing or floss
 - c. Hackle - lime
- 3. Red Trude
 - a. Tail - brown hackle fibers
 - b. Body - scarlet floss or dubbing
 - c. Hackle - brown hackle

V. Caddisfly and stonefly patterns

A. Elk hair caddis

- 1. General pattern
 - a. Hook: dry fly
 - 1) 1x to 2x long
 - 2) Sizes 8 to 22
 - b. Thread: 6/0 brown or black
 - c. Hackle: brown or furnace (grizzly or

PREPARE, BIND IN, and WIND the hackles in place, finishing with a compact head and whip finish.

TIE an additional pattern if desired.

NOTE that the Trude patterns are useful as both dry fly patterns suggesting stoneflies and as streamers suggesting swimming stoneflies and minnows.

PASS OUT the materials needed for the selected Trude pattern, while explaining the pattern to the participants.

DEMONSTRATE the selected Trude pattern, leaving the fly in the vise as a model for the participants to use.

EVEN the tail fibers and bind in a shank-length tail. **ATTACH** the body materials at the base of the tail and wind them forward to the shoulder area, binding them in place.

EVEN the tips of the wing material slightly and **APPLY** the wings with the tips reaching approximately to the tip of tail. The wing should be low to the body, downwing style.

BIND IN and WIND a hackle collar in front of the wing and finish the head.

ENCOURAGE participants to tie additional Trude patterns if they desire.

PASS OUT the materials for an Elk Hair Caddis (EHC) while discussing the pattern and some of its variations.

DISCUSS the use of grizzly, red grizzly, variant or cree hackles

- cree useful for some patterns)
- d. Body: dark hare (olive, dun, black, or light tan fur may be substituted)
- e. Rib: fine gold wire (optional)
- f. Wing: light elk hair
- g. Head: trimmed butts of elk hair
- 2. Tying procedures
 - a. Attach rib, if desired, at bend
 - b. Attach tip of hackle feather near bend
 - c. Prepare and apply dubbed body
 - d. Palmer hackle to shoulder
 - e. Apply rib, if used
 - f. Prepare and bind down elk hair wing
 - 1) Cut small bunch from hair patch
 - 2) Bind in place with tips beyond bend
 - 3) Apply several slightly looser wraps behind tie down area to clump hair
 - g. Trim butts of hair to form head
 - h. Whip finish and apply head cement
- 3. Alternative methods for hackles
 - a. Bind in hackle at shoulder
 - b. Wind rearward over body to tail
 - c. Spiral ribbing over hackle, binding it to body materials
 - d. Bind in rib
 - e. Trim excess hackle tip away
- B. Bird's Stonefly No. 1
 - 1. Pattern
 - a. Hook: 2x-4x long
 - b. Thread: orange or dark amber
 - c. Tail: black bear guard hair
 - d. Body: orange floss with bands of furnace hackle clipped short
 - e. Hackle: furnace
 - 1) Pressed flat to project at sides only
 - 2) Trimmed relatively short
 - 3) Lacquered
 - f. Wing: brown bucktail tied flat over body
 - g. Head: orange tying thread
 - h. Antennae: black bear guard hairs
 - 2. Tying procedures
 - a. Attach thread at rear of shank
 - b. Bind in two small whisks of black bear
 - c. Alternate bands of orange floss and clipped narrow bands of furnace hackle
 - d. Bind in a flat bucktail wing
 - e. Apply a hackle collar
 - 1) Select relatively short furnace hackles
 - 2) Wind a band of hackle as a collar
 - 3) Using a bit of lacquer, adjust the hackles so they project only at the sides of the fly
 - 4) Trim tips if necessary
 - f. Bind in bear hair as antennae
 - g. Wind a modest head, whip finish and

in tying caddisfly imitations. **NOTE** some of the more useful color combinations for your area.

DEMONSTRATE tying an EHC, leaving the fly in the vise as a model for them to use as a reference.

DEMONSTRATE the alternative method of attaching hackles for this pattern. **DISCUSS** pros and cons of the technique.

If desired, **PASS OUT** the materials for a Bird's Stonefly No. 1 while discussing the pattern.

DEMONSTRATE tying the pattern while discussing the techniques used. **LEAVE** the completed pattern in the vise as an example and model for the young people to use.

NOTE that using relatively short hackles permits the tier to use the entire hackle fiber instead of trimming it to length once it is lacquered in place.

- lacquer
- 3. Variations on the pattern
 - a. Numerous variations
 - b. Size from about #18 to #4 4x long
 - c. Colors from bright yellow and orange or red to black (match local flies)
 - d. Hair, hackle, feather strip or no wings
 - e. Ron's Little Olive Stone
 - 1) Hook: #18 dry fly
 - 2) Tail: pale olive hackle whisps
 - 3) Body: pale olive hackle quill, wound and lacquered
 - 4) Hackle: pale olive
 - 5) Wings: none
 - 6) Head: olive or yellow tying thread

DISCUSS some of the variations in this group of patterns, noting that some of these flies that are classically tied with hair wings may even be tied as wingless patterns.

This pattern evolved from a hairwing pattern to a hackle point winged pattern to a variant type without wings. It is often most effective when used when tiny, skittering stoneflies are being fed upon selectively.

DISCUSS situations where these flies are indicated and the methods used in fishing them if desired and time permits.

- VI. Fishing them
 - A. Excellent rough water flies
 - 1. Excellent flotation
 - 2. High level of buoyancy
 - B. Situations calling for them
 - 1. Selective feeding on stoneflies or caddisflies
 - 2. Searching or prospecting patterns
 - C. Fishing techniques
 - 1. Dead drift
 - 2. Riffing or skimming
 - 3. Skittering
 - 4. Streamer fly retrieve after dead drift

Summary Activity

Have participants display some of the flies they have tied, comparing their proportions and tying techniques. Discuss situations in which these flies are indicated for fishing in the local area. Encourage parents, teen leaders and youth to share their experiences with these patterns.

Lesson Narrative

Hairwing and hair bodied dry flies are outstanding searching patterns for the dry fly angler. Some of the patterns are excellent when selective fish are feeding on either stonefly or caddisfly hatches, presenting the silhouette that selective fish are keying on during those hatches. They are also excellent patterns in rough or broken waters where visibility and floatation are both important to success. Each class of hairwing pattern includes some basic pattern elements, similar to other dry fly patterns.

Wulff Patterns

In the Wulff series, the tails and wings are tied with some variety of hair. Deer hair was used in the originals, but many other types are used in addition to deer hair. Kip, impala or calf tail is used in many patterns. Mink, fitch or ferret tail hair is outstanding in durability, but somewhat more difficult to work that are deer or calf tail. Bear hair is outstanding in durability, but it is also hard and a bit more challenging for the beginning tier to use. Woodchuck guard hairs make an excellent, hard substitute for deer hair, either variegated or nearly blond. In general, the bodies and hackling on these flies is quite heavy, yielding a buggy appearance that is attractive to fish.

Lee Wulff originated the patterns that bear his name. One of the most effective and useful of the Wulff patterns is the Royal Wulff. While the pattern is buoyant enough to allow the use of fairly heavy wire hooks, using fine wire hooks increases floatation and eases hook penetration. It sacrifices a bit in durability and strength. The pattern for the Royal Wulff follows.

Royal Wulff

Hook: dry fly (e.g. Mustad 94840, stout to 2x fine)
Thread: 6/0 black
Wing: white calf tail, deer hair, mink tail or polar bear
Tail: deer body hair, brown calf tail or woodchuck guard hairs
Body: peacock herl, scarlet floss and peacock herl in equal thirds
Hackles: Coachman brown
Head: lacquered black tying thread

The Royal Wulff is tied in a conventional manner. Start by binding in the wings, setting them up and dividing them with a figure 8 wrap. Once they are in place, lift the butts of the wing hairs and trim them at an angle. Adding a drop of head cement or CA cement adds some mass but may increase durability somewhat. Carry the tying thread to the tail area, and bind in a shank-length tail. Bind in several strands of peacock herl and form a tough strand by winding the herl and thread together. Wind approximately one-third of the body with peacock herl. Trim the herl ends away and attach a piece of heavy scarlet floss, winding an even floss body over the next third of the body. Finish the body with an additional band of peacock herl ending at the base of the wings. Now, prepare and bind in a pair of coachman brown hackles, winding a relatively heavily hackled fly. Finally, trim the hackle tips, wind a smooth head, whip finish and apply head cement.

Many other Wulff patterns are popular with anglers. Several of those patterns are listed here for your use, if desired. While the original patterns were tied with deer hair, many tiers prefer to use other hairs for the wings and tails. For brown deer hair, consider using woodchuck guard hairs, natural mink tail, fitch tail, or brown calf tail. For white deer hair consider trying white mink tail, ermine tail, polar bear or white calf tail.

Grizzly Wulff

Thread: amber or dull orange
Wing: brown deer hair
Tail: brown deer hair
Body: hare's ear or grayish tan fox fur
Hackle: mixed red grizzly and grizzly

White Wulff

Thread: white or primrose
Wing: white deer belly hair
Tail: same as wing
Body: white or cream fur
Hackle: pale badger

Gray Wulff

Thread: gray or black
Wings: brown hair as above
Tail: brown hair as above
Body: gray fox or muskrat dubbing
Hackle: medium blue dun

Ausable Wulff

Thread: amber, orange or black
Wings: white hair as above
Tail: dark amber woodchuck guard hair (legs)
Body: pale brown-amber dubbing
Hackle: mixed brown and grizzly

Black Wulff

Thread: black
Wings - dark brown or black
Tail - dark brown or black
Body - pink or pale white dubbing
Hackle - black

Humpies and Irresistibles

Humpies and Irresistibles are hair bodied flies tied in contrasting manners, but useful in similar types of fishing situations. They have somewhat bulky bodies and excellent floatation qualities that make them ideal for rough or broken water. The Irresistible uses a densely packed, spun hair body that is shaped into a slimly tapered body. It is tied with hair wings. The similar Rat-faced McDougal is tied with hackle point wings. The Irresistible is tied with either black or amber thread. Both the wings and the tail are tied of brown deer hair or calf tail. (Some use calf body hair.) The body is composed of clipped, spun hair. The original pattern used fine deer hair, but many tiers prefer caribou because it spins and packs very nicely. The hackles are dark, rusty dun.

While some tiers begin with the wings, most find that working from the tail forward is easier. Start by tying in a clump of hair at the bend of the hook as a tail, leaving it about the length of the shank. Trim the butts of the hair at an angle, leaving a nicely tapered base for the body. Spin or stack a tight body of either deer body hair or caribou up to the shoulder area. Tie off the tying thread, and trim the hair carefully to shape, remembering to hold the scissors flat and to remove excess materials carefully. Bind in a small clump of brown hair as wings, leaving the tips of the hair pointing forward. Bind them in place, stand them up securely with several wraps of thread, and separate them with a figure-8 wrap. Trim the butts of the hairs carefully to a slim taper and wind the tying thread back over them. Prepare a pair of rusty dun hackles, bind them in place and wind them on one at a time, tying them off at the head. Trim the hackle tips, wind a compact head, whip finish and apply a drop of head cement to finish the fly.

Several variations of this pattern are in common use, and a pair of them are listed below if you should wish to try them. .

Yellow Irresistible

Thread: black or yellow
Tail: red hackle fibers
Body: spun yellow deer hair
Wings: brown hair as above
Hackle: brown or dark ginger

Rat-faced McDougal

Thread: black
Tail: ginger hackle fibers
Body: spun caribou or deer body hair
Wings: grizzly hackle points
Hackles: ginger

Hairwing Rat-faced McDougal

Thread: black or amber
Tail: woodchuck leg hair
Body: spun deer hair or caribou
Wings: white deer or calf tail
Hackles: ginger

Humpies use folded deer hair as an upper layer of a body over a tightly wound underbody of thread in a color to match the pattern. Natural deer hair is used for a tail and the folded over-body hair is used for the wings as well. Like the Irresistible, this pattern is usually tied from tail to head. Also like the clipped hair bodied flies above, humpies are an outstanding choice for rough or turbulent waters.

The general structure of these patterns calls for a deer hair tail, an underbody of tying thread matching the color of the pattern, an over-body of deer hair tied in with the natural tips tied in projecting over the tail, then folded forward to form the wings, and hackles to match the pattern. Several variations are in common use, each one distinguished by the thread color used in tying the underbody and the hackles used. Fine, dark deer body hair is used for the wings, tail and back of the pattern.

The patterns start with a rather heavy tail of fine deer hair. It is bound down with tying thread and trimmed to length as a foundation for the body wraps. A small strip of plastic is placed over the top of the tail materials before measuring the back and wing hair and binding it in with the natural tips of the hair extending rearward. The thread is then wound over the tail base and the bases of the body and wing hair, forming a smooth and uniform underbody. The tips of the wing and back hair are drawn forward and bound down at the front of the body and wing base. The body is then folded forward and the wings are bound down with the tips forward beyond the eye of the hook. Wind several turns of thread over the wing materials and stand them up, winding several turns in front of the wings and separating them with a figure-8 wrap. Prepare and bind in the hackles. Wrap the hackles one at a time, taking about 3-4 turns in front of and behind the wing bases. Trim the hackle tips, form a neat head and whip finish, applying a drop of head cement to finish the fly. Variations in red, olive, chartreuse, yellow or tan can be combined with hackles in coachman brown, ginger, grizzly, olive or mixtures of those colors.

Red Humpy

Thread: scarlet
Tail: brown deer hair

Yellow Humpy

Thread: yellow
Tail: brown deer hair

Back and wings: brown deer hair
Hackles: coachman brown and grizzly mixed
Head: lacquered tying thread

Back and wings: brown deer hair
Hackles: dark ginger
Head: lacquered tying thread

Trudes

Trudes are versatile patterns that share the buoyancy and bugginess of the others in this series. They differ in being tied with a streamer-like wing in a down wing style and in having hackles tied in as a collar. Their silhouette resembles stoneflies when drifted on the surface, and they may suggest either fish or swimming stonefly nymphs when pulled under and retrieved. The general pattern begins with a dry fly hook in sizes from about #8 to #18 either ex long or 2 ex long. Thread to match the body color is used. A tail of either hair or hackle fibers is added, followed by a body of dubbing or floss. A white calf tail, deer hair, or calf body hair wing is tied in down wing style, and hackles to match the pattern are wound on as a dry fly collar.

Of the several patterns that are in common use, we will use the Royal Trude as a tying example. It uses black thread, a golden pheasant tippet tail, a body of scarlet floss with peacock herl at the butt and shoulder, white hair wings reaching to the end of the tail, and coachman brown hackles as a dry fly collar.

The pattern is tied from tail to collar, much like a streamer fly. Start by attaching the thread near the bend of the hook. Stip a small bunch of golden pheasant tippet fibers and bind them in place as a tail. Start the body by binding in 3-4 pieces of peacock herl at the tail tie-down area. Wind them around the tying thread to create a tough-cored herl strand. Wind several turns of herl to form a butt on the body. Tie off and trim the herl, being careful not to cut the tying thread in the process. Carry the thread forward to the shoulder area and bind in a strip of scarlet floss. Wind the floss smoothly back to the herl butt and return it to the shoulder area to bind it down. Create another section of herl at the front of the scarlet body. Attach a wing of calf tail, bucktail or calf body hair with the tips reaching to the tip of the tail material. Trim the butts of the wing material at an angle to allow for a smooth tied down area. Prepare, bind in and wind a pair of coachman brown hackles as a dry fly collar between the shoulder and the head area. Trim the hackle tips, wind a head and whip finish. Finish the fly by applying one or more drops of head cement.

Red Trude

Tail: brown hackle fibers
Body: scarlet floss or dubbing
Hackle: brown or fiery brown

Lime Trude

Tail: lime hackle fibers
Body: lime dubbing or floss
Hackle: lime

Other Downwing Patterns

In waters where caddisflies and stoneflies represent significant food sources for fishes, patterns to imitate or suggest them are extremely useful. Two major patterns are suggested here, with many variations in both size and components possible. Bird's Stonefly and the Elk Hair Caddis have been selected as examples that will allow the tier to expand to cover this group of patterns nicely.

The **Elk Hair Caddis** is a well-established western pattern that has found its way into many anglers' assortment of flies. It has no tail, a dubbed body, palmered or reverse wound hackles, an optional fine gold wire rib, and elk or similar body hair as a downwing. Tied in sizes from about 8 to 22, this pattern can be prepared in an assortment of colors, with gray, black, tan, brown, fiery brown, and olive being the most useful. Some tiers begin by attaching the hackle by its tip at the bend of the hook and work forward. Others bind in a fine gold wire as a rib before applying the body, then attach a hackle conventionally at the shoulder before spiraling back over it to the bend and anchoring the hackle with the ribbing material. For durability, the former approach is used here, but the latter will be discussed in case the tiers wish to try it.

Elk Hair Caddis

Hook: dry fly x long size 8 to 22
Thread: 6/0 brown or black
Tail: none
Hackle: brown or furnace (grizzly or cree for some patterns)
Body: dark hare(olive, dun, black, or light tan fur may be substituted)

Rib: fine gold wire (optional)
Wing: light elk hair (down wing)
Head: trimmed butts of elk hair

Select a size 10 or 12 hook for the demonstration pattern. Bind the thread to the hook near the bend, and bind in a ribbing hackle by its tip, palmer style. Spin and apply a rough body of selected dubbing, stopping at the shoulder. Palmer the hackle forward and bind it down at the shoulder area, trimming the excess hackle. Clip a small bunch of elk hair (hock hair or other short hair is preferred for smaller patterns) and apply the wing as a tent. Bind it in place with several firm turns of thread. If required, slightly looser turns may be used to control the wing material and get it to conform to the desired shape. Wind several turns of tight thread and whip finish the fly. The butts of the hair may be trimmed as a head.

An alternative approach to tying the hackles requires the use of a fine gold wire rib. Bind in the rib, apply the body material, and bind in one or two hackles by their bases at the shoulder. Spiral the hackle back to the back of the body in open spirals. Holding the hackle in place, tightly wind the ribbing in the opposite direction, crisscrossing the hackle and binding it down at every turn. Secure the rib at the shoulder before applying the wings. A similar use of the rib could be applied to a palmered hackle as well.

Stoneflies

Stoneflies can be a major component of gamefish diets in some waters. In others, they may not represent a major portion of the annual energy budget, but they are significant during at least some period of the year. Most stonefly patterns come from western North America, where stoneflies, including the *Asalmon flies* are major hatches that attract big fish to the surface. The Trude patterns are both attractors and stonefly patterns, but among the more famous stoneflies are Bird's stoneflies. The pattern below is for Bird's Stonefly No. 1.

Bird's Stonefly No. 1

Hook: dry fly 2x-4x long
Thread: orange or dark amber
Tail: black bear guard hair
Body: orange floss with bands of clipped furnace hackle
Wing: brown bucktail, tied flat
Hackle: furnace, lacquered to project at the sides only and trimmed if necessary
Head: orange tying thread
Antennae: black bear guard hair

This pattern is executed in a conventional manner, tail to head. The major differences are in handling the hackle collar and in building the alternate rings of floss and clipped furnace hackle for a body. The body hackle is not palmered or used as a rib, but applied in distinct rings or bands. The collar is trimmed and lacquered to project only at the sides of the fly forward of the wing bases.

Stoneflies are tied in a wide variety of sizes. Although hair wings are most common on the larger patterns, some patterns call for feather slips, hackle points, or other wing materials. Others call for no wings at all, being tied as variants. An example of this approach is Ron's Little Olive Stone. This pattern was developed after a frustrating evening on the water. A heavy, mixed hatch of mayflies was coming off, and the water fairly boiled with rising fish. Our March Brown and Grey Fox patterns were hit occasionally, but mostly they were ignored as the fish rose all around them. Frustration and curiosity caused me to sit down to watch the rises rather than beat my head against the concrete bridge abutment upstream. Although the mayflies were very numerous, a fairly large number of tiny, yellowish flies were also hatching. The fish were slashing at them, sometimes clearing the water to take flies that had launched into the air. I went on a "bug hunt," swatting and scooping until I got one. It turned out to be a tiny yellowish green stonefly. Several prototypes were developed late that evening, including hairwing, hackle point winged, and wingless versions. The variant type turned out to be deadly on the fish any time the tiny stonefly was on the water. Tying methods are quite conventional and straightforward.

Ron's Little Olive Stone

Hook: dry fly #18
Thread: pale olive or yellow
Tail: pale olive fibers
Body: pale olive hackle quill, stripped, wound and lacquered
Wings: none
Hackle: pale olive about one or two sizes too large
Head: tying thread, whip finished and lacquered

Fishing These Patterns

Many of these patterns are excellent prospecting flies when the fish are surface minded, but not actively working a hatch that permits them to be selective. Excellent floatation, good buoyancy, and a buggy appearance make them effective in stimulating strikes. It also makes them a fine choice when fishing rough, broken or turbulent water, where they are easy for both angler and fish to see them. The caddisfly and stonefly patterns are indicated when the fish are feeding selectively on natural insects they suggest. During those selective periods, the angler may need to have the right combination of size, silhouette and colors in order to take a fish. The Trude patterns provide an additional element for the angler, after being fished through a dead drift or being skimmed over the surface, the fly can be fished back as a sunken streamer pattern.

Unlike traditional mayfly imitations, the caddisfly and stonefly patterns may be fished effectively by riffing or skimming them over the water surface, twitching them to cause a skittering movement, or simply drifted with the current. Experiment with them on your local waters, and try different approaches to see which ones seem to generate the most strikes.

Exhibit or Sharing Suggestions

1. Prepare a poster, models or photographs to show the steps in tying one of the patterns included here.
2. Study fly-fishing literature to locate other flies of these types that might be useful in your area. Try them and share the results of your studies with your group.
3. Prepare a demonstration on tying one of these patterns and present that demonstration appropriately.
4. Prepare a photographic story of tying and using one of these patterns.
5. Record your experiences with tying and using these flies in a journal. Share your journal with others as desired.
6. Make a series of flies and fly pattern cards that can be exhibited at a fair or similar gathering.
7. Try variations of the one or more of these patterns to see if you can develop something that works better for the fish in your area. Record your experiments and experimental patterns in a journal and share your findings with others in your group.

Community Service and "Giving Back" Activities

1. Consider ways of helping other young people learn how to tie flies, setting up tying clinics or instructional programs for interested people.
2. Tie a set of flies that can be used as auction items or door prizes in community events or fundraisers.
3. Donate flies to a local fishing program.

Extensions or Ways of Learning More

1. Observe fish and the foods that they eat on your local waters. Using what you know about tying flies, try to develop a pattern that imitates or suggests a food the fish seem to prefer. Research existing fly patterns to see if someone has developed a fly that does what you want. Modify existing patterns or create your own pattern in an attempt to catch the fish you are seeking.

2. Collect stomach contents from fish you like to catch. Observe the contents of those stomachs and record what you find in a notebook. Determine if their food habits are the same all the time or if they change with the time of day and season. Use references to entomology or other fields to assist in identifying what the fish are eating and attempt to create a seasonal reference to their favorite foods.

3. Observe fish actively feeding on a local stream, pond or lake. By careful study, see what they are eating and how they feed. Do they take everything that is a potential food item, or are they selecting something from a set of food choices? What characteristics seem to determine which food items are taken and which ones are rejected?

How can that apply to your fly tying efforts?

Links to Other Programs

The link to the rest of the sportfishing program is obvious, particularly to the angling skills and aquatic biology sections. Fly tying is a natural link to fly fishing as well as to crafting other types of tackle. Rod building can be a means of having an excellent fly rod at a lower cost. Study of the biology of local waters can make you a much better angler. The feathers, furs and other materials needed by a fly tier can lead to interests in hunting, trapping, waterfowl, poultry science or other seemingly unrelated fields. Understanding aquatic ecology as well as keen observation skills are important to success in both tying and fishing flies. This can provide entry into the sciences, either as a future vocation or as an avocational activity. Fishing flies can lead to an interest in several fields of engineering. Tying flies can be a great introduction to economics and marketing for young entrepreneurs. Finally, the hobby of tying flies is both craft and art. It can lead into many other areas of activity from writing and photography to science.