



JOURNAL

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Information

Please Review & Respond

FYI

Change Order

Participants

Olive Green
2 T. Rit Kelly Green #32
1/2 T. Rit tan #16
1/2 T. Rit gold #23

Fluorescent Chartreuse
3/4 t. Veniard flowers yellow
1/4 t. Veniard flow. lime green

Bright Green
3 T. Rit dark green #35
3/4 t. Veniard fluorescent lime green

25 c. water
1/4 c. white vinegar

Distribution

30 min to 1 hr.
1 T Tintex Color Remover
8 c. water

Degreasing
1/4 c. Downy liquid / Joy + Wisk
3 gal. hot tap water
to degrease

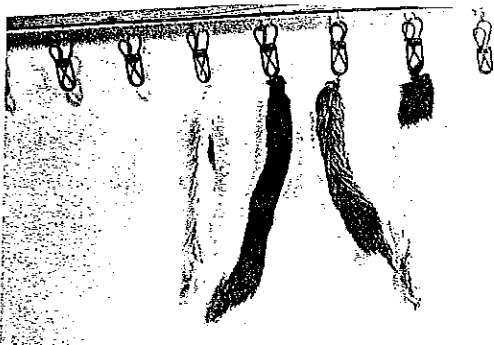
DYEING and BLEACHING

clip and align the hair naturally by gently encircling the tail with your hand and stroking toward the tip several times. (Pressing this material between newspapers will cause the hair to bend and take an unnatural set.) Hang the tails by the butts as shown in the photo below. They will be completely dry in only a couple of days. Don't store them away in a box until they are bone dry. Remember, the dried tails contain bone, flesh, and tendons that will create a hell of a smell if you allow any mold or mildew to grow on them. You will be able to determine how well they are drying by trying to bend the tail. If the tail bends easily and seems rather flexible, it's still quite damp. If the tail seems rather stiff or breaks easily (as squirrel tail often does), it's dry and ready for storage. I always allow them to hang for an extra day or two just to be on the safe side.

I like to store my dyed calf and squirrel tails in a separate box for each color. If space is a problem for you, then I'd advise putting each dyed tail in a long narrow plastic bag and storing all of them in the same box labeled appropriately.

(See color plate #7, Dyed Calf Tails.)

Calf tails on drying bar.



7 FURS

I must have every kind of natural fur dubbing that is available. Some is dyed, some is bleached, but most of it is in its natural color. Almost all has been tanned, and most of the pieces were acquired from a furrier I once knew who saved all the trims from his work; when he had a grocery bag or two full of scraps he'd give me a call. You'd be surprised how much rabbit is used in fur coats and jackets. In many instances the guard hairs have been cut back so that they are no longer than the underfur. This looks real nice on a fur coat, but the pieces are useless to a fly tyer who wants the fur pieces for tying dry flies, because there is no way to remove the guard hairs. But I didn't throw these pieces away—I saved them

for blending nymph dubbing mixes, where guard hairs are desirable.

I'm to the point where I use nothing but rabbit fur on all my dubbed-body dry fies. The underfur on the sides and belly of a rabbit is extremely fine and among the softest of all furs. Beaver is better, but not quite as available and much more expensive. You can get handfuls of rabbit skins for a little pocket change. Better yet, find some supplier who sells a lot of Zonker strips and ask him to grab a handful of each color of scrap belly and side fur and send it to you. He'll be glad to get a few dollars for what was scraps to him but is super dubbing for you. All you will have to do is cut the pieces into strips, remove the guard hairs and either use it as is or blend the colors you want. I'll talk more about blending in the chapter on mixing and blending furs.

There are some rabbit growers who raise rabbits for restaurants. Many of these animals have snow-white skins. Get your hands on a half dozen or so of these skins and you'll have a supply of dubbing fur that will last a lifetime. Understand that these skins will probably be air dried and may contain a lot of dried animal fat. White rabbit often has fewer guard hairs on the back and very dense underfur. I think it's worth the effort and time it takes to degrease and dye pieces of this fur for dry-fly dubbing.

Degreasing

I use one quarter cup each of Downy liquid, Joy, and Wisk laundry detergent in a three-gallon bucket of hot tap water to degrease air-dried rabbit skins. The concentration can be increased if you have some very oily skins, but the above mixture should work for three or four skins at a time. Remember to scrape as much animal fat off the skins as possible before putting them in the degreasing solution. If the fur around the edges of the skin feels sticky and is discolored from fats and oils, use a razor blade to cut away a thin strip all the way around the skin. The less fat and oil that goes into the degreasing solution, the better it will work. Leave the skins

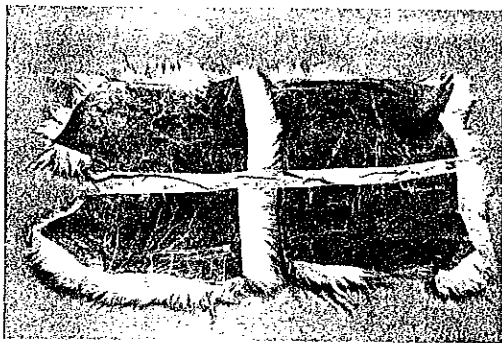
in this solution for at least two days, stirring periodically. In about a day, you may notice a yellowish film floating on the surface of your degreasing solution. This is an indication that the fats and oils are loosening and coming to the surface. It doesn't mean that the whole batch is getting rotten.

I don't leave the skins in the degreasing solution for more than three days because I'm afraid the hair will begin to loosen and fall out. Remove the skins one at a time and rinse each one very thoroughly under warm tap water. Try to remove as much of the soapy solution as possible. Roll the skin in paper towels to blot away as much excess moisture as possible, then use your hair dryer to dry the hair side of the skin. Do not wring or twist or you'll tear what is now a very soft skin.

Once you have dried the hair side of the skin, you'll be able to determine which part of the skin you want to dye. I wouldn't recommend trying to dye the entire skin in one dye bath. You'll end up with so much dubbed fur of one color that you'll never use it all. I usually cut a full rabbit skin into four pieces, then cut one of the quarter sections into three-quarter-inch-wide strips for dyeing. One fourth of a rabbit skin provides an ample amount of dubbing and by cutting the quarter piece into strips, I have pieces that are easy to work with when they are dry. They also dye more thoroughly since there are more edges for the dye to work into. Since the skins will be very soft after degreasing, I think it is best to remove the guard hairs after the strips have been dyed and are partially dry.

Carefully brush the fur to its natural lie on the remaining three quarter pieces and press them between layers of newspapers as discussed in drying necks. The dried skin will become quite stiff and will be a lot easier to store and cut into strips later if the skins are perfectly flat.

If you have tanned white rabbit hides, you can forget all about the degreasing method discussed above because the tanning process removes all the fats and oils from both the skin and the fur. All you need to do with a tanned rabbit skin is cut it into quarters, cut one quarter piece into three-quarter-inch strips, remove the guard hairs from each strip, soak the strips for a couple of hours in warm



Quartered rabbit skin

water and Downy fabric softener, rinse, and dye. It's rather easy to remove the guard hairs from the narrow strips. Simply grip the tips of the guard hairs between your thumb and forefinger and give them a quick tug. It doesn't take long to remove all the guard hairs from several strips of rabbit fur. You should remove the guard hairs from the strips before you soak them in the Downy and water solution. (See photos on next page)

Dyeing

Select a dyeing recipe from Chapter 9. Carefully mix the dye or dyes and white vinegar and adjust the heat control to 140 degrees F. Cut a small piece from one of the strips you are going to dye and test dye it. The test piece will also give you an idea of how the dye



Pulling guard hairs from strip



Rabbit strips with and without guard hairs

reacts to your material. When you think the test piece is dark enough, remove it from the dye bath, rinse under cold water, then under hot, squeeze in a folded paper towel and dry the fur with your hair dryer. If you got it right, put all the fur pieces in the bath at the same time. If the dye bath needs some adjustments for color or tint, keep test dyeing small pieces until you're satisfied that the dye bath is exactly as you want it.

It is best to dye nothing but white furs, as you'll get cleaner and brighter colors. However, you can dye light gray or light tan furs to shades of color that are darker than the fur's natural color. It is important that you take a little time to study the color wheel before you try this. You can achieve some beautiful deep olives and dirty oranges by dyeing naturally colored furs.

I try to resist the temptation to dye any fur that already has a natural color like ginger, steel gray, slate gray, tan, or brown because it is so easy to alter these colors by mixing them in a blender with fur that is already dyed. These same natural colors are often what is needed to tint some dyed furs before the dyed color is just right. For example, if you have a skin with a natural color of light creamy tan, you can make some beautiful Light Hendrickson dubbing by adding just a pinch of pink dyed rabbit to five or six pinches of the creamy tan.

Drying

Remove all the pieces from the dye bath when they have reached the color you desire. Rinse them under cold tap water to set the dye, then under hot tap water to remove any excess dye particles clinging to the fur and the skin. If you dyed air-dried hides, you probably should rinse the fur pieces in a weak soapy solution of one teaspoon of Joy liquid and one gallon of warm water. The degreasing never really gets all the oils from the air-dried hides and more of these oils will have cooked out during dyeing. There will be some oils on the fur and this will remove most of them. Swirl the

dyed pieces around in the soapy rinse a few times and then rinse under lukewarm tap water, gently squeezing and releasing as the water runs over the fur. Tanned fur pieces need not be rinsed in a weak soapy solution because there are no oils left in those skins.

Squeeze as much excess water from the dyed pieces as possible, then roll them in folded paper towels and blot by squeezing firmly. Do not twist or wring the pieces because these skins will also be soft enough to tear. Use your hair dryer to dry the fur side only. If you dyed air-dried fur, examine each piece carefully to determine if there is any oil clinging to the outside edges of the fur. You can easily tell if this has happened because the hairs along the outside edges of the dyed pieces will appear damp, yet the hair dryer won't seem to dry them. Take a single-edge razor blade and cut this very thin strip of skin and fur away from the rest of the dyed piece. If you dyed tanned fur pieces, there will be no problem with oils on the fur.

After you have dried the fur side, place the pieces on several layers of folded newspapers and carefully stroke the hair on the skin to its natural lie. Place several more layers of newspapers on top

Oils on dyed rabbit hair



DYEING and BLEACHING

and store for two or three days. Change the papers that come in direct contact with the pieces every half day or so. Keep in mind that the skin portion of these dyed pieces will become very brittle when completely dry. There will also be some significant shrinkage of the skin. The time to remove guard hairs from these dyed pieces is before they are bone dry. I usually pull the guard hairs when the pieces have dried to a point where they are not quite as stiff as a thin piece of cardboard.

8

BLEACHING

I have long admired the beautiful creams and honey blond colors of some of the bleached fly-tying materials I sometimes find in fly shops. There are bleached rock pheasant tail feathers, bleached beaver, bleached elk and deer body hair, and a host of other materials. I seldom use these materials in their bleached state, but it occurred to me that once the natural dark brown and gray colors are removed, it should be a simple matter to dye these hairs, furs, and feathers to some colors that would be of special value because of the materials' texture. I read everything I could get my hands on that might give some hints on how to do this. I even talked to some suppliers, who were very hesitant to offer any information I could

use. Even piecing together the occasional hints I got didn't give me enough to start experimenting.

Then one lucky day several years ago, I met an angler and fly tyer who just happened to be the manager of a beauty supply store. Not only did the store offer hair treatments to its customers, it also sold the supplies to those who wanted to bleach and color their hair at home. After buying him several cups of coffee and a bagel or two, I was able to extract just enough information (and supplies) to try my own bleaching. My theory was that if the chemicals were safe enough to use on a person's head, they should be safe enough to use on fly-tying materials without ruining the delicate furs and fibers, and my new friend agreed.

I purchased a bottle of forty percent volume peroxide and a one-pound container of Clairol Basic Professional White, Extra Strength Powder Lightener. (The five percent peroxide that is available at your drugstore or grocery is not powerful enough for our use.) On the way home, I stopped at the grocery and bought a quart of household ammonia. I got out all the notes I had accumulated over the years about bleaching and concocted the following formula:

Mix six scoops (a small plastic scoop comes in the Clairol can) of Clairol lightener with a little hot water to make a paste. Keep thinning this paste until you have a two-cup container of a thin milky solution. The powder has a very strong odor and I don't think it's very wise to inhale it. Be careful not to create a dust cloud when handling the powder. (There are some cautions to this effect printed on the container. Read and observe them carefully.) Pour this solution into your dyeing pan. Then:

- Add one cup of forty percent volume peroxide and mix the two ingredients thoroughly.
- Add one half cup ammonia and mix thoroughly.
- Add four cups hot tap water and mix thoroughly again.

Turn on the exhaust fan if you have one, or open a couple of windows, to allow the ammonia and Clairol fumes to escape. I suppose one could get a little "dingy" if you used this stuff on a daily basis, but I don't think there is any harm in playing around with it

once or twice a year. Use your head and try to keep from breathing the fumes.

The above mixture is enough to complete a number of bleaching chores. I use it primarily to bleach cream hackles to white and I always do that first, while the mixture is at its peak strength. Then I will throw in a couple of strips of deer or elk body hair, or a couple of grizzly rooster or hen necks. It will also bleach moose body hair, fox squirrel tails, black bear body hair, even peccary. The latest use I have for it is bleaching brown dry-fly necks to ginger! A few years ago, brown dry-fly necks were very scarce and we had to learn to dye ginger necks to brown. Now the situation has reversed and ginger necks seem to be few while brown necks are plentiful. However, be warned that bleaching brown to ginger is rather tricky and time consuming. If you bleach the brown neck too long in an attempt to achieve a light honey ginger, you'll probably ruin the neck. All the hackle fibers will begin to curl and appear much thinner. Try this on a piece of old neck butt that contains roughly the same quality of feathers as the neck you wish to bleach to determine if you really want to chance it on an expensive #1 or #2 dry-fly neck.

Regardless of what material you wish to bleach, first be sure that every feather or hair has been thoroughly soaked in a warm, weak soapy solution. This is not an attempt to remove any oils from the fur or feathers but is intended to make certain that everything is wet and will bleach more quickly and completely. Soak the materials for only a few minutes, then rinse the soapy solution from them under warm tap water and put them into the dye pan holding your bleaching solution.

Make sure that all the feathers or hair are saturated with the bleaching solution. Turn the material often and press the solution into the material with your fingers. (You should, of course, be wearing your rubber gloves.) Periodically lift the material from the bleach and squeeze all the solution from it, and then put the material back. This will help to ensure that there are fresh bleaching chemicals in direct contact with the material for longer periods of time.

Try to keep the bleaching solution at about 100 degrees Fahrenheit — no hotter. *Never* reheat the solution on your hot plate while the materials you're bleaching are still in the pan. Remove

the material, reheat the solution, remove the pan from the hot plate, and then put the material back in the pan. Since the liquid volume of the bleaching solution is not very great, there is a strong possibility that the coils of your hot plate will create hot spots on the pan that will ruin any hackle fiber or hair that touches them.

You will be the judge of when the materials are *bleached* light enough. I have never been able to bleach natural gray deer hair to snow white, for example. I'm not even sure it's possible. But you can achieve some very light honey gingers from almost all natural hairs and feathers. The trick is to remove as much natural color as possible without ruining the fibers. *Never* attempt to bleach with Clorox, as it destroys fibers.

Rinse the bleached material very thoroughly, first under warm tap water for several minutes, alternately squeezing and releasing the material to flush as much of the bleaching solution out as possible. Then mix a weak soapy solution of one teaspoon liquid Joy dishwashing detergent and one gallon of warm water and swirl the bleached material in it for several more minutes. Rinse completely and squeeze to remove the excess water. Blot the material in folded paper towels and use your hair dryer to dry all but the skin side. Either press the material between layers of newspapers or hang from a drying bar as outlined earlier.

Manufacturers of some of the products sold in beauty supply stores will no longer sell to anyone but a professional hairdresser, since some people have misused the products (on their heads), burned their scalps, and sued the maker for damages. To protect themselves from further abuse, the companies have withdrawn some of their products from sales to the consumer. You'll have to be very careful how you acquire some of the materials I have listed above. It could cost you several dozen flies at the very least, or possibly the exact location of one of your favorite fishing spots. If you can get your hands on this material, don't tell even your closest buddy where you got it. There are a lot of very understanding folks involved in our sport, and with a little discreet questioning you'll be able to find a supplier.

(See color plate #8, Bleached Materials.)

9 DYE MIXES and RECIPES

Rit powder dyes contain a great deal of salt, which must be dissolved before you can use the dye. Rit liquid dyes also contain salt, but it is already dissolved and suspended with the dissolved particles of dye. The significance of the choice between liquid or powder is that there is a major difference in the amount of dye of either type you will use for a specific dyeing job. The label on the back of a 1 1/8-ounce box of Rit powder dye indicates that one package of dry powder will dye one pound of dry weight, or about three yards of medium-weight fabric. The eight-ounce bottle of concentrated Rit liquid dye will dye two pounds of dry weight. To further compound this difference, you seldom need to use an entire package of dry dye. Since salt particles are heavier than dye

particles, it is entirely possible that one day you may measure out a teaspoon of dry dye and get ninety-eight percent salt and two percent dye particles. Some days or weeks later you may measure another teaspoon of dye from the same package and get eighty percent salt and twenty percent dye particles. Considering the enormous difference in dye strength between two percent and twenty percent, I'm sure you can guess what the result might be if you attempt to match colors from previous dyeing chores.

You can solve this problem by making your own liquid working solution from the powder dyes. Empty two packages of dry Rit dye (same color!) into a coffee carafe, add one cup of water and bring to a slow simmering boil. Stir and simmer until all the salt and dye particles have dissolved. You may notice a scum line develop around the inside of the carafe; it contains impurities from the dissolved salt and dye, and perhaps some weird stuff from your water. Don't be too concerned about this. Keep stirring until you're convinced that not all the particles are going to dissolve and remove the carafe from the hot plate to cool a little before pouring the liquid into a plastic bottle for storage. Boiling hot liquid could melt the thin walls of some plastic bottles and cause a terrible spill. When that happens, you are faced with a major clean-up and the fiercest wrath from all others who inhabit your house. Using a funnel will also reduce the chances of spilling. When I pour the liquid dye from my carafe into a plastic bottle, I always set the bottle in the sink, just in case. That little precaution has saved me from major embarrassment on several occasions. You can either save plastic juice bottles or buy them at your local hardware store. The only caution I would offer here is to make certain that the plastic bottles you choose have screw-on caps. Snap-on caps also snap off, usually at the worst time.

You have now made your own liquid dye working solution. Every time you measure a teaspoon or tablespoon of this solution into your dye bath, you can be absolutely certain of the strength because all the ingredients have been dissolved. To be on the safe side, I give the bottle a couple of shakes before measuring out dye for a bath.

Since we made our solution by dissolving two packages of dry dye



Plastic bottles and funnel

(each of which would dye one pound of dry fabric) in one cup of water, one would probably be willing to assume that the strength of our solution and liquid Rit is equal, since the label on the eight-ounce liquid dye says it will dye two pounds of dry material. Don't assume, test dye! I think the factory version of the liquid dye is stronger and normally use less of it than I would of the liquid concentrate I make from two packs of dissolved dye. A couple of warnings:

- All Rit powder dyes, and only Rit powder dyes, should be dissolved into a working solution as described above. You will be measuring small amounts from the working solution to create dye baths using the recipes listed later.
- Never attempt to make a liquid working solution from high-concentrate powder dyes such as Veniard.

Check out the various fly-fishing magazines and other periodicals for advertisements by manufacturers and distributors of high-concentrate powder dyes such as Veniard. This stuff is very powerful and you should be extremely careful when using it. Just a dozen grains spilled on your counter top (or, worse yet, your car-

pet), will change the color of whatever it's on the instant moisture comes in contact with it. I have found that Formula 409 is great stuff for removing stains left from splatters and spills. Keep these powerful dyes in tightly closed glass or plastic containers and stored away from moisture. If you use glass containers, be certain that you store them someplace where there is no possibility of breakage.

Try to get all your fluorescent dyes from the same supplier. If you can't, find the local supplier of Tintex brand dyes. This company produces dyes that are called "neon green," "neon pink," and "neon yellow," for example. I haven't used them, but I assume (and I know it's dangerous to assume anything), the colors will be what we know as fluorescent. The label on the box says "Manufactured for KIWI BRANDS, INC." But it doesn't say who did the manufacturing. A few days before turning this manuscript in to the publisher, I learned that Rit now manufactures the same three neon colors. Keep your eyes and ears open to new ideas and new products.

Remember the following before you attempt to dye:

- The following dye mixes, recipes, and formulas are (with a few noted exceptions) all added to twenty-five cups of water and one quarter cup of white vinegar.
- Again, with a few noted exceptions, all are meant to dye up to six rooster necks or three bucktails at a time.
- If you wish to dye fewer than six rooster necks or three bucktails, do not decrease any formula by more than fifty percent or use fewer than sixteen cups of water for the dye bath.
- The Rit dye formulas are all based on a standard of making your own working solution from two packages of dry Rit dye and one cup of water as described earlier.
- The temperature of the dye bath should never exceed 140 degrees F.
- All material to be dyed (except tanned hides) should be degreased.
- Rinse all soaked and degreased material thoroughly.

- Constantly stir and turn the material in the dye bath.
- All wet material will appear darker than when dry.
- Be certain that all excess dye has been washed away before drying and storing the dyed material.
- You must have white to dye to bright!
- The quality of your water supply may affect some of the recipes.
- Clean your bamboo tongs with Formula 409 and a sponge under hot water before you handle any light colored material in the dye bath. There will always be a residue of dye on the arms and tips of your tongs from the last dyeing session. If you don't clean your tongs, you may put dark marks on your white bucktails or cream/white rooster necks.
- Always clean the dye pan with Formula 409 and paper towels after each dye bath. Rinse with hot tap water and dry.
- Never save used dye.

You should have some understanding of the color wheel that artists use when they mix their paints. Check out a book on color from your library and read it just to get a little understanding of colors and how they react to each other. Grumbacher produces a color wheel (Cat. No. B 420) that shows you what you get when you add colors together. It's a color-computing device that has a rotating disc with windows in it. Choose a color to add to another and the window will show you what color the mix will produce. It's an invaluable tool when you want to mix dyes to produce different shades. Write to M. Grumbacher, Inc., 460 West 34th Street, New York, NY 10001 to find the name and address of the nearest distributor of their products.

Mixes and Recipes

Light dun from cream white rooster necks or saddles
 2 tablespoons Rit pearl grey #39
 1/2 tablespoon Rit tan #16

DYEING and BLEACHING

Medium dun from cream white rooster necks or saddles
5 tablespoons Rit pearl grey #39
1 1/2 tablespoons Rit tan #16

Slate dun from cream white rooster necks or saddles
8 tablespoons Rit pearl grey #39
2 1/2 tablespoons Rit tan #16

Medium dun from domestic cream white hen or pullet necks or backs
4 tablespoons Rit pearl grey #39
1 tablespoon Rit tan #16

Regular brown from medium ginger rooster necks or saddles
2 tablespoons Rit cocoa brown #20
(less than) 1/4 teaspoon Veniard Summer Duck
Note: This is a recipe I found in one of Eric Leiser's books.

Coachman brown from medium ginger rooster necks or saddles
3 tablespoons Rit cocoa brown #20
1/4 teaspoon Veniard Summer Duck

It takes a little more time to dye to Coachman brown and you may have to add a fourth tablespoon of Rit cocoa brown to the dye bath to achieve the deep, dark, reddish brown quality of a true Coachman brown.

Wood-duck flank from mallard flank
10 cups water
1 cup wet flank feathers
1 tablespoon Rit tan #16
2 tablespoons white vinegar

DYE MIXES and RECIPES

Olive green
2 tablespoons Rit Kelly green #32
1/2 tablespoon Rit tan #16
1/2 tablespoon Rit gold #23

This recipe originally called for 1 1/2 tablespoons of Rit avacado green and one teaspoon of Rit Kelly green. Rit avacado is no longer available, so you will have to adjust the amount of Kelly green and tan to achieve the right tint of olive. Remember that there is a lot of red dye in tan; if you add too much, you will begin to turn your dye bath gray as the green and red particles begin to neutralize each other.

Salmon fly orange (dirty orange)
1/4 teaspoon Veniard orange
1/4 teaspoon Veniard Summer Duck

Grass shrimp blue (bonefish)
1 tablespoon Rit royal blue #29

Whistler pink (saltwater)
7 tablespoons Rit rose pink #7
1 teaspoon Rit scarlet #5

Light tan calf tail from natural white
2 tablespoons Rit tan #16

Light tan turkey T-base from natural white
2 tablespoons Rit tan #16
(20 cups water, 2 cups wet turkey)

Fluorescent chartreuse from any pure white natural material
3/4 teaspoon Veniard fluorescent yellow
1/4 teaspoon Veniard fluorescent lime green

Sulphur dun wings from domestic cream white hen or pullet necks

*First dye with 3 tablespoons Rit yellow #1
then over-dye with 3 tablespoons Rit gray #39*

Experiment with one ratty old neck to find the right "wet" color of yellow on the first dye. (You want a neck with a slight yellowish cast to it.) Then, immerse the same neck in the gray dye bath to put the slight tinges of gray to each feather that the natural insect has on its wings. It only takes a few moments in the gray dye bath to achieve this effect. These are beautiful necks when you get them right. I would strongly suggest that you dye only one neck at a time, as it's very easy to get both colors too dark.

Pale morning dun wings from cream white hen or pullet necks

*First dye with 1 tablespoon Rit tan #16
then over-dye with 1 tablespoon Rit pearl gray #39*

Use the same over-dyeing technique described above for sulphur dun wings. The first dye should result in a very light cream to light tan cast. The second dye should add tinges of gray to each feather, but not cover the light tan.

Bright green (not fluorescent) from any pure white natural material

3 tablespoons Rit dark green #35
3/4 teaspoon Veniard fluorescent lime green

Light blue (soft hackle for steelhead flies)

10 cups water
1 tablespoon Rit light blue #26
8 cream white hen neck butts

Purple from any natural cream white material

4 tablespoons Rit navy blue #30
1 tablespoon Rit scarlet #5

Yellow bucktails

3 bucktails
1 teaspoon Veniard yellow

Red bucktails

3 bucktails
1 teaspoon Veniard bright red

Blue bucktails

1 tablespoon Rit royal blue #29 for each bucktail
An additional tablespoon of Rit navy blue #30 will deepen the color

Black from any natural material

*First dye to very dark brown or red.
Then over-dye to black using one tablespoon of Rit black for each neck, or two tablespoons of Rit black for each bucktail. It takes a long time to get a good deep black. You'll probably have to add more dye to the dye bath and leave the materials in it for most of the day. (This is the only time you don't have to worry about adding fresh dye to a partially used dye bath.) Agitate and turn the material every ten minutes to ensure that the dye is getting down to the base of each hair or feather. Keep in mind that the water in your dye bath will evaporate and you'll have to keep adding water, or the heat from your hot plate could ruin the material you're dyeing.*

Medium brown grizzly for bass bugs

1 tablespoon Rit tan #16
1 teaspoon Rit cocoa brown #20
1 teaspoon Rit gold #23

Green drake grizzly

2 tablespoons Rit Kelly green #32
1 tablespoon Rit tan #16
1/8 teaspoon Veniard yellow

The above recipes will help with most of your dyeing. By the time you have tried all of them, you'll no doubt have discovered some other colors you'd like to try. Don't be afraid to experiment. And be sure to keep accurate notes on how much of each dye, which kind of dye, and how much water you used.

You'll find several degrees of hardness to the quality of some materials. Harder materials seem to resist accepting a dye. Have patience—all natural materials can be dyed.

Dyeing Stripped Hackle Quills

The following recipes are based on ten cups of water and two tablespoons of white vinegar mixed in a coffee carafe. Each recipe will dye up to six bundles of stripped rooster hackle quills.

Medium blue dun from white
1 tablespoon Rit gray #39

Medium brown from white
1 tablespoon Rit tan #16

Pale yellow from white
1/8 teaspoon Veniard yellow

Cream from white
1 teaspoon Rit tan #16

Olive quill from white
(for *Baetis* & Blue-winged olive bodies)
First dye with 1/8 teaspoon Veniard yellow
Then over-dye with 1 tablespoon Rit Kelly green #32

The first dye should produce a yellowish cast to the quills. The second dye should produce light green quills with some of the yellow

showing through. Early and late-season naturals will be darker in color; summer naturals will be lighter. Dye your quills accordingly. To dye the quill bundles darker, simply leave them in each dye bath a little longer.

Melon Quill pink from white
1 tablespoon Rit rose pink #7

Dyeing Notes

Use the following charts to record your quantities and procedures. They will come in handy in the future if you repeat a recipe.

COLOR _____ FROM _____
MATERIAL AMOUNT _____
WATER _____ CUPS
DYE FORMULA _____

COLOR _____ FROM _____
MATERIAL AMOUNT _____
WATER _____ CUPS
DYE FORMULA _____

(See color plate #9, Stripped and Dyed Hackle Quills.)

Dyeing Notes

COLOR _____	FROM _____
MATERIAL AMOUNT _____	
WATER _____	CUPS _____
DYE FORMULA _____	

COLOR _____	FROM _____
MATERIAL AMOUNT _____	
WATER _____	CUPS _____
DYE FORMULA _____	

COLOR _____	FROM _____
MATERIAL AMOUNT _____	
WATER _____	CUPS _____
DYE FORMULA _____	

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*COLOR
REMOVAL*

Don't throw away any of your dyeing mistakes, especially if you used Rit dye. The Rit Dye Company and Tintex both market a product called "Color Remover," and it works pretty well. Neither product will remove all the color from the material you have dyed, but they'll get most of it—enough that you can over-dye the material to a different shade or tint from your original dye job. If you don't want to remove the color from a previous dye job you should save your dyeing mistakes anyway, because you can dye anything to black.

A few years ago I needed some large, bright green grizzly-neck butt feathers for some saltwater flies I wanted to tie, but didn't have

the right feathers to dye since I was between shipments of grizzly necks. I did have a box of green grizzly neck butts left over from tying a lot of Green Drakes, but the color wasn't bright or light enough. I'm sure you can see the problem I was faced with.

I tried Rit Color Remover on the Green Drake grizzly-neck butts, thinking that if it worked I could re-dye the necks to a higher and brighter color. It worked so well that I now recycle a lot of dyed necks that no longer have feathers of the right size. After only thirty or forty minutes, the eight dark green grizzly-neck butts I had put in the color remover solution were nearly back to their original natural color. There were still traces of a sickly looking yellowish green, but after another fifteen or twenty minutes I couldn't detect any appreciable additional fading of color, so I thoroughly rinsed the neck butts and re-dyed them with a mixture of fluorescent lime green and Rit Kelly green. The result was a perfect match to my pattern sample. I have since learned to pull and size the hackles I will need for a specific pattern and dye them as loose feathers. It saves a lot of time and material.

Both Rit and Tintex color removers are quite strong chemicals. If you use too much of them you can curl the individual hackle fibers on every hackle stem. You could easily ruin every neck you put into this solution unless you mix it properly. Also, the dry powders produce a strong odor when mixed with hot water to make the solution. Use this stuff near an open window or have an exhaust fan nearby to remove most of the fumes. There are no cautions on the package about breathing the fumes, so perhaps they're only a little obnoxious to keep you at a safe distance. There are some cautions about getting the material in your eyes and about "prolonged" skin contact. Wear glasses and rubber gloves. You should be wearing rubber gloves *any time* you are dyeing materials.

The Tintex package contains 1.9 ounces of dry color remover. According to the instruction sheet inside the box, this is enough color remover to treat one pound of material that is completely covered with water. Since a few neck butts weigh only a couple of ounces, I tried a formula of one tablespoon of dry color remover to eight cups of hot tap water, and it worked fine.

Pour eight cups of hot water into your dye pan, add one tablespoon of dry color remover and stir until all the powder has dissolved. This will be enough solution to remove most of the dyed color from five necks. Since you are attempting to remove color from some previously dyed material, there is no need to use the complete degreasing process as outlined earlier. Simply soak the material in lukewarm water for ten or fifteen minutes to make sure every hair or feather is wet.

Put the necks (or other material) into the solution all at once. Stir and turn the pieces frequently to make sure that fresh color remover is in contact with the material at all times. Try to keep the temperature of this solution no higher than 120 degrees. If you need to reheat the solution on your hot plate, remove the neck butts first, as there is not enough volume to the solution to keep the neck butts away from the very hot bottom of the pan as you re-heat it.

You may find that using only one tablespoon of color remover to eight cups of water will be a rather weak solution, and that it may take a while longer than thirty or forty minutes to remove as much color as you'd like. You may add small amounts of additional color remover to the solution, but I wouldn't add more than half a teaspoon at a time, and I'd give the original solution at least an hour's time to work before you add more. Remember, it is entirely possible to ruin the feather fibers if the solution is too strong. Remove all the necks from the solution before you add more color remover powder and stir thoroughly to be sure all the powder has dissolved.

Rinse any material that you have put in a color removal solution very thoroughly before you attempt to re-dye it. Wash it in a gallon of warm water with a teaspoon of Joy liquid and then rinse under warm tap water until you're certain all the color remover has been washed away. Any color remover remaining on your materials will weaken the dye; the dye bath will certainly not perform as well as it would with untreated material.

The instruction sheet that comes in the package of Tintex Color Remover contains a handy little chart of what colors should result when you use some common dye colors to dye material that has

DYEING and BLEACHING

already been dyed to another common color. Pin this chart to the wall in your dyeing room; it's a good guide and will help you to understand how colors react to each other.

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*STRIPPING
QUILLS*

I think that stripped peacock or stripped rooster hackle quills make far more realistic mayfly bodies than any other material. The finished fly has prominent segmentation, a finely tapered, carrot-shaped abdomen, and a smooth waxy surface, and it floats like a tiny cork. We can make the same observations about nearly all natural mayflies. Contrary to what seems to be a rather popular opinion, stripped quills are not so fragile as to make them an impractical tying material. If you really believe that, then I offer the opinion that perhaps one of two things happened to the quills you used: (1) they were very old and brittle before stripping; and (2) the quills were damaged during stripping. When you need to tie a half