

Bleaching Animal Fur

There aren't many of us old tiers around anymore. I'm not talking about our age, but rather those of us who tie and fish with the old patterns. Synthetic tying materials are becoming more and more common each day. The suppliers of natural materials are slowly reducing their inventories because of less demand and less availability. This makes it difficult for me and other tiers to acquire the materials we need to continue to practice our craft. As natural materials become less available so does the color selection offered by the suppliers which places us into a position of having to bleach and dye more of our own furs (for additional information on suppliers that handle rare, exotic and hard to find materials check out my web site at www.michigandryflies.net).

The techniques for bleaching haven't changed much over the last 50 years --- but the rules on bleaching solutions has. Years ago fly tiers who wanted to bleach some animal fur would simply go to a beauty parlor or beauty supply store and purchase a product called 'Clairoxide'. These products were basically a 20% solution of hydrogen peroxide (other similar products and brands were also available). Well --- that doesn't work today. The only products available today at beauty supply stores are 'stabilized'. To get the products to work one has to add an 'activator' or 'developer'. When this is done it becomes a creamy, slimy mess that's hard to work with.

Before going any further, let's take a moment for a quick chemistry lesson on hydrogen peroxide. Hydrogen peroxide is a pale blue liquid with the chemical formula of H_2O_2 . Water, hydrogen oxide, is H_2O . As you can see hydrogen peroxide is basically water with additional oxygen added to it. Enough added oxygen to make it a mild acid and 'oxidizer'.

Hydrogen peroxide has many uses. It can be used as a rocket fuel, a sanitizer, a wound cleanser, a bleaching agent and has even been attributed to killing cancer cells and relieving arthritic pain.

Household peroxide (3%) is relatively harmless and can be purchased at any drug store or supermarket. Regretfully, this concentration is not strong enough for our needs. **IN CONCENTRATIONS OF 20% OR ABOVE IT IS A HIGHLY CAUSTIC SUBSTANCE THAT SHOULD BE RESPECTED. IT CAN CAUSE SEVERE SKIN IRRITATIONS AND BURNS.**

Like carbonated water, when warmed, or shaken, it tends to release its extra bubbles of oxygen. It's unstable and does not store well over long periods of time. Like a carbonated beverage, to retain its full potency, it should be refrigerated.

So, where did I find hydrogen peroxide? I discovered it at a health food store. Many of them sell 'food grade' hydrogen peroxide (35%). It is pure and requires no 'developers'. You might check out your local health food stores and see if they have it on hand, or would be willing to stock it for you. If they do not carry it then here are a couple of internet sources:

Guardian of Eden www.dfwx.com/goewebsite.htm
or
Zerbo's Health Foods www.zerbos.com

Preparing Your Material: It is important to wash all animal furs prior to bleaching or staining. Washing your furs in soapy water removes grease and grime from the material. Most importantly it opens the pores in the material allowing the bleach or dye to penetrate more efficiently. I use good stiff brush to remove as much of the under hair as I possibly can. Then, I add a small quantity of dish washing detergent to a container, add your materials and fill with water. Soak at least 2 hours; longer will not hurt. Once cleaned, rinse it well with water.

Preparing Your Peroxide: Food grade hydrogen peroxide is 35%. For years tiers used a standard 20% peroxide. To make a 20% solution of peroxide from a 35% solution. Simply mix 4 parts of peroxide with 3 parts of water. **WHEN MIXING SOLUTIONS ALWAYS ADD STRONG TO WEAK. PLACE YOUR WATER INTO YOUR CONTAINER FIRST AND THEN POUR IN THE PEROXIDE.**

Beaching: Place your fur pieces into a container and add your peroxide. Remember do not allow the peroxide to make contact with your skin. Use tongs!

The length of time that the fur remains in the solution will be determined by the type of fur, the desired shade of lightness and the strength of the peroxide solution. It can vary from a few hours to a few days.

Bleaching (and dying) is stressful to the natural furs. The longer they are left in the solutions the more damage will be done to the original material.

Here are the results of a simple experiment to illustrate this procedure. I selected identical samples of deer hair for bleaching.

Placed in a 35% peroxide solution: 6 ½ hours later the desired shade was achieved, but the hair was literally falling off of the hide, and the hide was dissolving.

Placed in a 20% peroxide solution: 7 ½ hours later the desired shade was achieved. The hair was still attached to the hide. No visible damage.

Placed in a 17½ % peroxide solution: 9 ½ hours later the desired shade was achieved.

The hair was still attached to the hide. No visible damage. I chose this concentration intentionally because all that has to be done is to combine the water and the peroxide in equal amounts --- no calculations are necessary.

Add 'bleaching' to your list of fly tying skills. It is fun to do and will really help you out in a pinch when your suppliers can't.

See you on the water.....

Tom Deschaine

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