

# Protecting and Storing Your Trove of Fly Tying Materials

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[Editor's note: HTML links that are now inactive have been removed.]

For the fly tyer, storage has two related purposes: convenient physical placement of materials; and protection from voracious munching vermin. This article is about storage solutions that accomplish both of those ends. I do not profess to have the ultimate solution. Nirvana only knows that fly anglers are veritable fountains of creative, practical solutions. Of the precious few articles on this subject, none chronicle those practical gems, and most fly tying books contain only passing references to the subject. Even Eric Leiser's valuable book, *Fly Tying Materials* (1973), devotes a mere two pages to protection and storage. Much of what follows has been gleaned from casual discussions with other tyers, the sparse angling literature, and from correspondence with museum curators who must deal with conservation of natural materials in collections (see Smithsonian web site at <http://www.si.edu/scmre/takingcare/links.htm>, and National Parks Service web site at <http://www.cr.nps.gov/museum/publications> ).

Fly tyers are acquisitive hoarders who tend to rationalize when it comes to new materials, hooks, and a never-ending parade of gee-gaws. Skeptical spouses stare in awe at the bulging closet full of boxes, bins, and containers as we proudly display that new guaranteed-to-increase-catch-rate fifty dollar grizzly saddle patch. "Why, just think of all the money that saddle will save, sweetheart. When you consider the cost of store-bought flies, it's a real bargain." Yeah, right. I too labored under that common delusion 40 years ago when I began tying flies; i.e., I convinced myself that by tying flies for myself and my family I would save money. Unburdened with any conception of reality, I greedily poured over catalogs and made a general nuisance of myself at the local fly shop. I tied a veritable blizzard of patterns, stuffing my bursting fly boxes in maniacal pursuit of the holy grail: the ultimate fish-fooling fly. As tyers go, I believe that I am not atypical. Most of us begin in that manner, finally landing on a small inventory of reliable, proven patterns, and one or two of those special gems that cagey, experienced anglers secret away in a corner of a fly box, and obfuscate about when asked that old ultimate question: "Whatcha usin', friend?"

Still, the inevitable fall-out of a lifetime of cranking bugs is an amazing accumulation of things "needed" to create more and better flies. An example (as if I need one) will make my point. Several years ago I and three friends purchased the entire materials collection of a gentleman who, according to his widow, tied flies well into his nineties. As we began to sort through the huge collection, we found dozens of unopened boxes of Mustad, Wright & McGill, and other hook brands, many of which are no longer manufactured. His feathers, furs, hair, and other items were stored in those huge glass

bottles designed for mayonnaise, olives and similar foods. We counted over 120 of those jars, all stuffed to the limit. I rest my case, as the lawyers say. Apparently it's always been that way with fly tyers. But nowadays we store such a bewildering array of stuff that we need creative storage solutions to simply create the space required, and to provide protection from critters.

## **Protecting your investment against marauders**

Assume that bugs will, unless somehow restrained, fly, hop, slither, or crawl into your fly tying materials. The only ways to restrain them are to use physical barriers and/or various natural and chemical substances. There are also a few practical tools that help.

In years past, Draconian measures were used against the invading host. In doing research for this article, I ran across the following quote in George Leonard Herter's tome entitled Professional Fly Tying, Spinning and Tackle Making Manual (1973, 21st Edition): "A solution of DDT in water or carbon tetrachloride is also good when lightly sprayed on feathers or hair. Inflammable DDT solutions, such as the usual prepared mixtures, contain odorless kerosene and should not be used." Rachel Carson proved Mr. Herter correct in her book Silent Spring, about the lethal effect of such substances: not only do they eradicate vermin, they can also wipe out the host. Needless to say, such drastic remedies are no longer used. As a fly tyer, I shudder to think of colleagues of that day moistening their fingers with saliva while tying (as we are wont to do) after handling "protected" material.

Who are these bugs and what stuff do they get into? Most synthetics (tinsels, antron yarns and dubbing, for example) are relatively (although not fully) immune from infestation. Since natural materials are not, we will concentrate on them. The principal household pests are moth larvae and dermestid beetle larvae (I call them carpet beetles). The latter are tiny, usually furry, and move about slowly. Both critters are voracious. If you are a road kill aficionado, or if your hunting friends hand you a hide or a handful of feathers, the number of potential pests inhabiting the material increases exponentially (e.g., ticks and mites in deer hair, mites in wild turkey feathers).

Materials purchased in packages from shops and catalog suppliers are probably safe. Here's what Dennis Conrad of Conranch Hackle says in his article "Care of Hackle and Keeping the Bugs Out," found at [www.flyangleronline.com](http://www.flyangleronline.com): "Being in the business of selling bug free hackle we approach things differently than the fly tyer. We fumigate all of our products with a solution of formalin and potassium permanganate. This is done in a closed cabinet that is held at 99.5 degrees for a period of 10 hours...It is costly and not something I would recommend to fly tyers. Just rest assured that when you get a skin from us it is free of bugs."

What if you find evidence of hitchhikers, as most certainly will be the case with road kill and hunter-donated material? There are a number of ways to kill the critters:

1. Wash the material in hot water and dish detergent, scrubbing hides where necessary with a tooth brush. Allow the material to remain in the water for a half hour. Place it into an old nylon stocking; swirl and knead the stocking around in the water; rinse in a bath that includes a small amount of white vinegar. Then run water through it, smooth it out, and allow it to dry. Drying needs to be complete before materials are stored in plastic bags. If any moisture remains, the material will mildew, smell bad, and eventually become useless. Hair dryers work well, if the heat is kept low. For loose feathers in a nylon stocking, the head of the dryer can be placed into the stocking. Tack skins and hides to cardboard and hang them in a warm room for a few days. The cardboard will absorb water and oil.
2. If you know how to tan hides, the tanning process will kill vermin.
3. Freeze the suspected items in a plastic storage bag for a few days. According to sources at the Smithsonian, freezing at -20 degrees centigrade for 4 days will kill all freeze-sensitive vermin, including dermestid beetles and clothes moth larvae. Upright freezers may not reach that temperature; if that is the case, the freezing period should be lengthened. The Smithsonian also recommends adding moisture-absorbent material such as cotton to the bag. After thawing, put the objects into the microwave for 30 seconds or so. That should kill any pests that survive the freezing, including eggs. The Smithsonian cautions that there can be undesirable side effects from use of microwave ovens, such as uneven heating and localized overheating. Care must also be taken to ensure that there are no metallic objects mixed with the material, such as staples sometimes found in capes that have been previously attached to paper or cardboard.
4. Once you have decontaminated, don't reuse the old plastic bags, as eggs may lurk there. Wash other containers in hot, soapy water before replacing materials.
5. Use of insecticides (e.g., pyrethrum) could be effective, but the health risk is unwarranted in my view. During certain tying procedures, it is common to moisten fingers with saliva... 'nuff said. Fumes are also a problem.

Assuming that your materials are pest-free, how can you keep them that way? Here are some solutions:

1. Never store materials-especially natural materials-directly on the floor, even if containerized. Carpet beetles and similar vermin will be drawn to and will find their way into your treasures.
2. Mothballs are commonly used to prevent infestation. There are two types of mothballs. "N.O. mothballs" (p-dichlorobenzene), usually found in the form of a cake, reputedly kill pests. Not everyone agrees on that. It smells bad, and the presence of benzene, a known carcinogen, is scary. The other type, Napthalene crystals, will repel pests, but generally won't kill them. It too smells bad, but not as bad as p-dichlorobenzene. In my experience, mothballs don't deter the fish. A simple way to apply the crystals is to cut a small hole in the lid of a film canister, fill the canister with crystals, snap the lid on, and place the canister in your material storage container. The canisters will have to be refilled every few months. I've never used moth paper, but it supposedly will trap adult moths. By

the time that happens your materials have probably already been munched by larvae.

3. Natural repellents avoid toxicity problems. Opinion varies on their effectiveness, but it is worthwhile to mention some of them. Cedar has long been used to protect clothing from infestation. It can be purchased in ball-shaped form, in slats, or blocks, if mill wood is desired. Lumber suppliers sometimes have larger pieces that can be cut to shape and placed into your containers. You can also use cedar planks or strips used for flooring and paneling; you will need to sand these pieces periodically to keep the scent alive. You can also purchase cedar shavings (used for hamsters) and put them into a nylon stocking bag. A company called Cedar Fresh ([www.cedarfresh.com](http://www.cedarfresh.com)) makes fragrant milled blocks, and sells a revitalizing spray. Cloves are another natural deterrent. In the September/October issue of *American Angler*, the following herbal repellent recipe was featured: ½ cup pennyroyal; ½ cup tansy; 2 cups dried yarrow leaves; 4 cups dried mint; 2 cups dried wormwood; 1 cup dried rosemary; ½ cup ground cloves; 1/8 cup orris root. All of these substances can be found in health food stores. Mix the herbs and place portions in small bags made of nylon stocking pieces and place the bags into your containers. There are also herbal moth repellent packets similar to tea bags, marketed as “Moth-Away Repellent.”
4. Before mixing loose feathers (e.g., wood duck) into your clean collection, carefully check the fluffy bases of the feathers as this is a common place for insects to deposit eggs.

## Storage containers

Storage methods are a function of many variables: the quantity of material; the type of material; the relative size of the material; the type and amount of available storage space; and the tolerance level of the tyer's house mate. Other important considerations are convenient access, available lighting, and protection from hungry or curious house pets. In other words, there is no perfect universal solution. But there are a few simple ways to improve on cardboard shoe boxes, cigar boxes, grocery bags, cookie jars, discarded tool boxes, and similar contraptions. In general, my preference is to use plastic storage boxes stacked on shelves in a closet. There are numerous sizes and shapes of plastic boxes available, from shoe box size to nearly coffin size. Because chemicals such as moth crystals can deteriorate certain plastics, particularly the hard, brittle types, I select boxes made of the more flexible material. These seem to be impervious to the effects of the crystals. Boxes should have lids that snap shut tightly, and are stackable. I label each box and stack them in some semblance of order keyed to how often I need to dig into them. I have two boxes labeled “flash,” containing synthetics such as rubber legs, crystal flash, and similar items. Other boxes, labeled accordingly, contain yarn, chenille, buck tail, deer hair, dyed deer hair, elk hair, moose hair, miscellaneous hair, quills, pheasant, peacock, marabou, ostrich, flank feathers, kip and squirrel tails, saddles, dry capes, wet capes, natural dubbing, synthetic dubbing, foam, and extra threads. Each person will develop her or his own way of organizing, labeling, and filling their containers, but for those looking for help, my methods are a

beginning. Let's cruise through some broad categories of materials that present different storage problems, and develop solutions to those problems.

**Hooks, beads, eyes, threads, wires, tinsels, glues, paints, and other “non-material.”** These items can be stored in the little boxes or plastic bags that they came in. I have found this to be ineffective and difficult, especially with hooks: boxes abound, they break or tear; and the plastic ones have an evil propensity to spray hooks (especially small ones) when popped open. Beads and eyes normally come packaged in small plastic bags which defy rational organization. Spooled materials such as threads, wires, and tinsels present their own unique problems, as do glass and paints. What follows is a variety of solutions that I've landed on, most of which should be helpful to the majority of tyers.

For hooks, eyes, and beads, I use clear “Pro model 20” clear plastic boxes marketed by Spirit River. They contain 20 slots with handy curved bottoms. Each slot will easily handle 100 of most trout, steelhead, or bass/pan fish hooks. Salt water hooks take up more room. Another good brand on the market is “Oregonizer;” this brand also features curved bottoms in the slots. I also use these boxes for glass and metal beads and eyes. Each slot is labeled by size (e.g., 2mm, 3mm, etc.) on a card fitted to the inside of the lid. If the box comes without a card in the lid, the size can be written on the lid above the slot. Spirit River has a wood “tower” made to accommodate 6 of their hook boxes. I simply affix a label to the front edge of each box identifying the type of hooks in the box (e.g. dry fly, streamer, nymph, scud, etc.), and slide it into the tower. The towers occupy a tiny space, and are easily accessible when tying.

For spooled items, fabric or craft stores have racks that hold numerous spools. These also occupy little space and provide easy, visible access. If you purchase the Spirit River towers, they are fitted with spool-holder dowels atop the tower, which makes them doubly handy.

Glues present special challenges: they come in bottles, jars, and tubes that seem to be built for tipping, leaking, and spillage. To solve this problem I corral miscellaneous glue bottles in a small square food storage container stored near my vise. I use a similar, smaller one for tubed glues. When I need a particular bottle, it goes into a small plastic jar (the top of which has been cut off) fastened by a screw to my bench near my vise. By putting the glue bottle in the plastic half-jar, I avoid my proclivity to knock the bottle over. Been there, done that-it's a horrible mess.

Small paint bottles are stored and held in the same manner. But unless you use paints regularly, they can be stored elsewhere in a plastic shoe box in order to save space. I keep an eyedropper and various labeled thinners in the box with the paints. It's a good idea to check paints once in awhile and add thinner as needed to avoid having your paint dry out.

**Capes, saddles, and other feathers-on-a-skin.** Quantity and size are weighty factors in your selection of a storage medium. If you have only a few of each, large glass or plastic jars are ideal. Glass can be a safety problem if the jar is dropped on a hard surface. Choose plastic if your storage area is not carpeted. Either type provides good bug protection with a tight seal.

Alternatively, particularly if you have a large quantity of skins, try the stackable plastic boxes mentioned above. This method is useful where shelves are available. Be sure to put a film canister with moth crystals in each box.

If you have no shelves, and if sufficient room is available, consider the free standing plastic cabinets found at most big box retail stores. They generally contain six drawers of varying sizes. Although they are not tightly sealable, a film canister with moth crystals can be placed into each drawer. Some tyers use desk drawers in the same manner, using either moth crystals or cedar to ward off pests.

**Loose feathers.** Loose feathers present the “poof” factor-sneeze and the room is filled with floating plumage. Piling them loose into a plastic box doesn’t work. I use plastic bags with zippers, labeled as to type of plumage; the bags are stored in plastic boxes. For example, my flank feather box contains bags of mallard, wood duck, and other flank feathers.

**Furs, natural hair, and other hides.** These items present storage problems similar to feathered skins. While similar solutions are available, the main storage problem is the large variety of hides that fly tyers use, with the consequent need to keep them rationally organized. Selectively labeled stackable plastic boxes present the best approach where jars are too small.

**Loose dubbing.** Most natural and synthetic dubbings (and mixtures of the two) come in small zipper bags. Because these bags annoyingly difficult to open and organize, I began considering alternatives. I settled on, of all things, clear plastic urine sample bottles. They are small, durable, virtually vermin-proof, and inexpensive, and are available from medical supply houses. When I purchase or mix dubbing, I transfer it and its label to a bottle. A lot of dubbing can be compressed into a single bottle. I keep the bottles with natural dubbing in one plastic box and those with artificial dubbing in another box. Bottles of dubbing that I use regularly, such as hare’s ear, are kept on my tying bench.

There are other ways to store dubbing. A friend tells me that his method is to buy small plastic bags from the local craft store, stuff them with dubbing, and store them in 3” X 5” card file drawers, organized alphabetically by manufacturer or type.

Loose synthetic dubbing is also available in bulk. I simply put each type into a labeled plastic bag. The bags are kept in the same box as the urine sample bottles of synthetic dubbing.

Dubbing suppliers also sell assortments in small, handy plastic boxes that have a dozen or so individual compartments, each with a lid. These are available in color-based selections, and in degrees of coarseness. For example, Spirit River carries its “Fine & Dry” dubbing in a number of different color assortments, and an antron-based selection in various color groups. These containers take up minute amounts of room, and are easily stacked near the tying bench.

**Flashy synthetics.** For me this is a catch-all category, including hanked material such as Lite Brite, Flashabou, synthetic hair, crystal flash, and similar items. It also includes rubber leg material, various mylar sheets, and vinyl ribbing material such as V-Rib. Plastic boxes are ideal for these items, and vermin protection is unnecessary.

My method is to place each type of item in a large plastic bag; I then group the bags into two plastic boxes labeled “Flash” and “Other Flash.” Don’t ask-it makes no sense, but I do know what’s in each of those boxes.

**Foam.** Foam comes in sheets, tubular form, and other assorted shapes. To keep it simple, I put all of my foams into one large plastic box in various plastic bags. Vermin protection is unnecessary-unless black widows happen to be lurking about. I did find a scorpion in one of my boxes once.

**Yarn and chenille.** Yarn and chenille are generally carded. If you buy them from a craft store, they come in hanks. There being no apparent good way to manage the yarn cards, I simply store them loose in a plastic box along with the hanks. For chenille I use the same method, except that I keep the regular chenille cards separate from the ones containing flash by using large zipper bags.

Proper storage and care for your tying materials won’t necessarily increase your catch rate. But careful pest management will ensure that your materials will still be there in a usable state when you need them, and convenient storage will make those materials easier to find when the urge to crank bugs strikes.