Even without all of the aforementioned gadgetry, we can still exercise some control over temperature and humidity extremes. We can keep our textiles away from radiators, hot air registers and portable heaters, and we can keep them out of hot, dusty attics and damp basements.

Fortunately, the remaining groups, II and III, are more easily dealt with. The single item in Group II, light, is one with which we have all had experience. We all know the one cardinal rule: LIGHT FADES TEXTILES. The complex molecules which give a textile its color are rather fragile structures, and the energy carried in a beam of light is sufficient to break these structures down into simpler molecules which are often colorless. The ultraviolet light present in sunlight and in light from fluorescent tubes is the worst offender since it is the most energetic, but all light is harmful and the brighter the light, the greater the harm. Still, we need some light in order to see a textile; the best we can do is to limit that light. Storage presents little problem since boxes (except clear plastic ones), chests, drawers, and closets are dark most of the time. Display, however, is another matter. The best display situation would be a room dimly lit with tungsten filament light bulbs. When hanging a textile for display, sunlight should be avoided, which means in practice that textiles should NEVER be hung opposite windows.

For places where fluorescent light is used, special UV filters are available to put over the lamps. Another good way to cut out ultraviolet light is to use indirect lighting; light which has been reflected from a white surface is very low in UV wavelengths. One final thing to remember is that fading is proportional to the length of exposure as well as to the brightness of the light.

Therefore, do not keep any one textile on display too long.

Group III, handling and storage stresses, are particularly insidious since we are often unaware that they exist and do not see the effects until too late. Mechanical stress can do great harm since most old textiles are brittle and weak. Pieces of silk or linen can literally snap along sharp creases; heavy tapestries can tear from their own weight; delicate surface threads can be literally rubbed off.

In an ideal world every old textile would be laid out flat with no folds or wrinkles and in contact with no other piece. We do not live in an ideal world and must do the best we can. In the better museums really large pieces such as tapestries and coverlets are rolled around padded cylinders of reasonable large diameter, provided with clean muslin dust covers and secured with wide cloth tape. Smaller pieces including long strips of lace are sometimes similarly handled on smaller rollers. Storage of large rolled pieces presents some problems; usually they are hung from the ceiling by some sort of pulley system. Given the right sort of closet, such an arrangement could even be used at home and would take up a minimum of space. When textiles must be folded, pad the folds with acid free tissue or with clean cotton cloth.

Items in storage should be protected from the container and from each other. Acids from ordinary paper and boxes as well as from wood can migrate into a textile and damage it. Plastic bags, while not ideal, are better than nothing; again, clean cotton cloth is the best material for lining containers and for putting between layers of textiles when they must be stacked. Acid free paper and boxes are available, but are not easily obtained.

Although most of us will not be getting our textiles in and out of storage on a daily basis, we should take some care in handling them when we do. Pieces being handled...
should be supported as much as possible and never, never held so that all of the weight falls on just a few threads.

Attacks by insects (usually clothes moths) or by fungi (mold and mildew) rate as major disasters where textiles are concerned. The best cure is prevention, and if items are regularly inspected, aired and brushed, and if temperature and humidity are kept within bounds, such attacks will be very rare indeed.

Moth balls (usually p-dichlorobenzene) are not especially toxic to moths but act more as a repellent. In any case, concentration of vapor from the moth balls must be quite high, which in practice means that textiles to be protected must be kept in tightly closed containers. One more thing to note is that the moth balls should not come in direct contact with the textiles but should be encased in a little cloth bag. P-dichlorobenzene, incidentally, also helps prevent mildew.

If a moth attack does occur, commercial aerosol moth proofers which can kill the pests at all stages are effective. Results are not in concerning the long term effects of such products, but in the short run they seem to do little harm.

Most of us will eventually want to mount some small pieces for display. The following method, though one of several, is relatively simple and illustrates some of the conservation principles discussed.

Begin by choosing a piece of clean (well washed to remove sizing, etc.) light weight cotton or linen cloth whose color will enhance the textile to be displayed. Then staple it to the back of a wooden frame (a canvas stretcher will do) so that the warp and weft of the cloth follow the straight edges of the frame. Next sew the textile specimen to the background inside the frame with fine tacking stitches using fine cotton or silk thread and a fine ball point needle. Rows of stitching should not run clear across the piece in any direction be should be arranged as shown in figure 1. Once the specimen has been tacked to the background, fasten a piece of cotton flannel and a piece of peg board over the back side of the frame. Finally, the face of the wood frame can be covered with glass or Plexiglas and the whole package put into an appropriate frame. See figure 2. Note that if the flannel gives dust protection, the pegboard admits fresh air, and the space between the textile and the glass permits circulation. The display mounting is a miniature storage facility. A mounting incorporating the same principle as the above one can be made from acid free mat board.

Textile conservation is a large and complex subject which these two articles can only briefly introduce. Anyone seriously interested in the care of textiles should read as much of the literature as possible and consult knowledgeable curators whenever they are available.

Following are some sources of supplies and some books of interest:

**BIBLIOGRAPHY**


---

Item | Source
--- | ---
acid free mat board and barrier papers (our local suppliers) | Artsign Materials Co. 2501 - 26th Ave. S. Mpls 55406
acid free tissue | Aldy Graphic Supply Inc. 1115 Hennepin Ave. Mpls 55403
cardboard tubes | Hollinger Corp. Box 6185 Arlington, VA 22206
crepeline (mounting cloth) | Chicago Paper Tube & Can Co. 925 W. Jackson Blvd Chicago, IL 60607
crepeline (mounting cloth) | Transporo Co. P.O. Box 838 New Rochelle, NY 10502
stabilitex (mounting cloth) | Swiss Silk Bolting Cloth Mfg. Ltd. Zurich, Switzerland
General suppliers willing to sell in small quantities:

TALAS 104 Fifth Ave. New York, NY 10011
Pricreator Enterprises Ltd. 44 Park View Gdns, Hendon London NW4 2PN
Frank W. Joel Conservation Laboratory Supplies 9 Church Manor Bishop's Stortford, Herts.

One more book to read: *Caring for Textiles* by Karen Finch and Greta Putnam (it is not a manual for professionals, but a guide for those of us who have some old pieces in our care). I cannot guarantee that all of the suppliers will deal with you, but you can at least try.

Pat's articles on textile conservation originally appeared last year in the newsletter for the Madison Weavers Guild. Part I on how to wash a textile was published in the January issue of the *Weaver*. 