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1993

### NF93-137 Conservation of Textile Items

Shirley Niemeyer

*University of Nebraska--Lincoln*, [sniemeyer2@unl.edu](mailto:sniemeyer2@unl.edu)

Patricia Cox Crews

*University of Nebraska--Lincoln*, [pcrews1@unl.edu](mailto:pcrews1@unl.edu)

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Niemeyer, Shirley and Crews, Patricia Cox, "NF93-137 Conservation of Textile Items" (1993). *Historical Materials from University of Nebraska-Lincoln Extension*. 1187.

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## Conservation of Textile Items

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*Shirley Niemeyer, Extension Specialist, Home Environment*  
*Patricia Cox Crews, Associate Professor of Textiles*

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Textile heirlooms and keepsakes require special care to preserve them for future use. Conserving textile keepsakes and heirlooms involves an understanding of light, temperature, humidity, insects, storage, display, and cleaning.

### Light

Any type of light can cause fading, therefore, low light levels or darkness are recommended for textile storage and display areas. Ultraviolet rays from sunlight and fluorescent lights can damage fibers and cause fading.

### Humidity and Temperature

Moist air, warmth, and lack of air circulation encourage growth of mold which can stain fibers and cause deterioration. Inspect textiles regularly for mildew. A relative humidity of approximately 50 percent and temperatures of 60 to 65 degrees are generally suggested for most textile items. Avoid extreme fluctuations of humidity and temperature levels.

### Insects

Paradichlorobenzene (PDB) moth crystals will aid in controlling insects. Place the crystals in a cloth bag or sock at the highest level possible in the storage closet or cabinet. Use moth crystals only for temporary measures. Avoid long-term use of PDB and other insecticides as they can react with materials. The chemical should not directly touch the textiles. Check for any possible damage to paints, fabrics or colors. PDB is toxic.

Cedar chests and closets may deter moths but they do not kill moths at all stages of their development and have no effect on carpet beetles.

### Product Pollutants

Ordinary cardboard, paper, metal and wood deteriorate textiles and should not come in direct contact with textile items. Acids can migrate from wood and paper to textile items. Layers of acid-free tissue, acid free mat board, or washed unbleached cotton muslin can be used to protect the textiles, and to line boxes or containers. Wash the muslin yearly to retain its neutral state.

Acid-free boxes and acid-free tissue can be purchased from conservation supply businesses and changed occasionally (every 2-5 years). If not available, substitute fresh white tissue and change it yearly.

Avoid colored papers and tissue such as blue tissue as some are not colorfast and can stain textiles if moistened.

Protect textiles from direct contact with wood (especially unsealed wood such as cedar chests). Avoid storing cotton, linen and rayon in cedar chests as the acid from the wood is especially harmful to these fibers. Woods used near or in contact with textile items can be sealed with polyurethane varnish.

Plastics should not be used for storage as they may not allow air circulation and may give off by-products as they decompose. Moisture, trapped inside tightly sealed plastic covers, can result in mildew. Plastics also attract dust as a result of the static electricity generated.

## **Storage**

Avoid attics, basements, kitchens, laundry rooms and unheated areas for textile storage. Store items away from outside walls and areas where people smoke.

Items, such as plastic and metal parts, and other similar items, should be protected with muslin or acid-free tissue prior to storage as they may cause stains.

Store textile items flat if possible. If items must be folded, use acid-free tissue or muslin to cushion folds. Refold occasionally to distribute the wear.

Textile items can also be rolled onto acid-free cardboard tubes (at least 3 inches in diameter). Wrap regular cardboard tubes with several layers of acid-free tissue or muslin. Wrap the textile item loosely around the tube, being careful to avoid creases. Some textile items may need layers of acid-free tissue or washed unbleached cotton muslin inserted as the textile is rolled onto the tube. Quilted items should be rolled with the topside to the inside.

Fragile items and garments should not be hung. If items are sturdy enough to be hung, pad the hanger with polyester fiberfill and cover with washed unbleached cotton muslin. To support the weight of heavy skirts, use a shell or twill tape to support the item. Loosely stitch the shell or tape at the waist and to the hanger. Store with closures fastened.

Cover stored textiles with acid-free tissue or washed unbleached cotton muslin (wash yearly). Fabric covers allow air circulation.

## **Display**

Muslin can be attached to the backside of a textile item to protect the item if it is hung. Attach two layers of twill tape for a casing at the top of the hanging. Insert a wooden dowel between the layers. Hook and loop tape can also be used. Attach the hook portion of the tape to a board fastened to the wall. Attach the loop portion to the textile item across the top of the back side for even support. Use only on textiles

items sturdy enough to support the weight of the item.

A backing fabric (washed unbleached cotton muslin) can also be stretched over a frame and the textile item basted to the backing.

Remove textile wall hangings occasionally to allow them to rest. The stress of continuous hanging strains the yarns. Hang textile items smooth. Folds and creases will cause streaking and fading and can cut threads.

## **Cleaning and Care**

If safe for the textile item, vacuum the item to remove loose dirt particles that can abrade and cut fibers. Vacuum at low suction (open vent slots). Place a piece of clean tulle or fiberglass screen over the textile item if the item is fragile or could be damaged or stressed by vacuuming.

Clean old textiles only if the process will not affect the color, shape or strength of fabric. Color loss, bleeding, shrinkage and distortion can result. However, the correct choice of cleaning procedure can protect the fabric by removing materials (foods, grease, etc.) that attract insect pests, helping to rid fabrics of insects, improving the appearance, and neutralizing the piece.

Wet cleaning (use of water) removes the acid build-up from cotton and linen textiles and leaves them cleaner and more flexible. Wool and silk are more difficult to wet clean as they become weakened when wet.

To check for colorfastness, test each color and fabric with several drops of water. Let it soak in and then blot with a white blotter, tissue or cloth. Test several times in inconspicuous places. Repeat the procedure for use of a detergent solution. No hint of color should appear. If any part of the textile item is not colorfast, do not wet clean it.

Dry cleaning can damage fragile textile items. The friction and abrasion of agitation as well as the heat can damage the item. Solvents used in dry cleaning also remove the oils and waxes in natural fibers. Request use of fresh or filtered solvent if you have a textile heirloom dry cleaned. Ask also that, for most textile keepsake items, the item not be steamed or pressed after cleaning.

Damaged or weak areas can be strengthened by mending torn places and providing support for thin areas and stress points. A lightweight sheer fabric such as organza can be loosely stitched over the area to add stability.

To preserve the condition and extend the life of textile items, keep them as clean as possible.

## **Resources**

- Keck, C. K. *Care of Textiles and Costumes: Adaptive Techniques for Basic Maintenance*. Nashville, TN: American Association for State and Local History (Technical Leaflet 71).
- Kline, J. S. *Care and Storage of Textile Heirlooms*. Clemson, South Carolina: Cooperative Extension Service, Clemson University, (TC 415).
- MacLeigh, A. B. (ed.) *The Care of Antiques and Historical Collections*. Nashville, TN: American Association for State and Local History, 1984.

- Ordonez, M. and Slinkman, Z. *Quilt Conservation*. Manhattan, KS: Cooperative Extension Service, Kansas State University.
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***File NF137 under TEXTILES, CLOTHING AND DESIGN***

***B-7, Care***

***Issued April 1994***

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*Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Elbert C. Dickey, Director of Cooperative Extension, University of Nebraska, Institute of Agriculture and Natural Resources.*

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