The repair of damaged books and documents is a concern of all librarians. Public libraries find their children's and popular fiction books get the most use and hence wear out more quickly. Often, it is cheaper to purchase a new copy. If a replacement cannot be found, then the decision needs to be made to repair or withdraw. Paperbacks can be stiffened upon receipt to prolong their useful life, hard covers and paperbacks can be sent to a library bindery for rebinding, and minor repairs can be done in-house. For mass-market books that are not going to be retained by the library, there are suitable pressure-sensitive clear and colored laminates available.


For libraries with historic collections, please do not use any book repair tapes, laminates or non-reversible adhesive to repair books. CLRC and other regional library councils periodically sponsor book repair workshops to train library staff in basic, safe repair techniques. For treatments beyond the basics, such as the leather bound volume at the right contact a professional book conservator or order custom clamshell boxes from www.archivalboxes.com.
Scrapbooks present a myriad of problems to the curator or librarian. The inherent structural problems combined with the nature of the paper, the adhesives, and, often, the layering of the memorabilia make scrapbooks extremely difficult to use. For research purposes, facsimile copies in microfilm, photograph or digital formats are easier to handle and less damaging. Store fragile scrapbooks in boxes. Another option with scrapbooks is to remove the items, re-mount them to acid-free paper, encapsulate them, and post bind. Any form of reformatting should be done in consultation with or by a professional conservator.
Slides and photographs are sensitive to light, water, pollutants and use. Store materials in sleeves, in boxes or albums, and in cabinets. This layered approach to storage protects from handling, dust, pollutants, and rapid environmental changes. High heat, humidity, light and gaseous pollutants from automobile exhaust, curing oil-based paints, photocopiers, wood, and wood finishes will all cause fading, discoloration, flaking of the gelatin layer, and embrittlement.

Store photos and slides in an area with temperatures less than 65 degrees, with a relative humidity of 30-50%, and in boxes to limit light exposure.

Photo and slide storage materials can be purchased from Gaylord Archival. Items of use can be found in the catalog or at www.gaylord.com.
Water damage leads to tide lines, warping, mold, and staining. Make sure water sensitive items are stored away from water pipes and opened windows. Also, do not use attics, basements, or garages for the storage of books, paper, leather, textiles, paintings, or other susceptible materials.
Photographic negatives are found on different types of bases. From 1855 through the 1920's, glass plate negatives (below) were popular. Around 1890, flexible plastic films were introduced. These early films were made of cellulose nitrate, a highly flammable substance. "Safety film" has been common from the 1940's and is made of the less flammable cellulose acetate. Modern safety films are made of polyester and are chemically stable. Deteriorating nitrate and acetate negatives will have strange odors, become sticky and will shrink. Cellulose acetate (right) is prone to "vinegar syndrome". The key indicator for this type of degradation is a strong vinegar odor emanating from these negatives. Vinegar syndrome leads to the shrinkage seen to the right. Reformat degrading negatives by copying onto modern polyester film or digitizing and store the originals in buffered paper envelopes in a cold space like a frost-free refrigerator.

Glass plate negatives are fragile and need special storage to prevent undue damage. Store in four-flap enclosures in protective boxes. Support broken plates with a stiff 60 pt. board. Nitrate and acetate films should be boxed with paper, polyethylene or polyester sleeves in an area with no light, temperatures between 50 and 60 degrees or less and humidity between 30 and 40%.

Find 4-flap negative enclosures and Negative Envelopes in the Gaylord Archival catalog. More information on photo and negative storage can be found in Gaylord Pathfinder #3.
Animal and insect damage on books can be prevented through proper storage, housekeeping and patron education ("The dog ate my book"-below). Do not store materials in the basement, attic or garage. They are tasty snacks for the insects and rodents that live there. Regular cleaning and emptying of trash will also help keep down infestations.
Light damage is a problem common to books, textiles, leather, furniture, paintings, and other objects routinely found in historic collections and libraries. Once discovered, it is impossible to reverse. The best way to avoid fading due to light exposure is to limit the amount of light in exhibits and to store items in protective boxes. Books should be stored away from uncovered windows and under UV filtered light if fluorescent lights are used in stacks areas. Remember that damage caused by light exposure is cumulative so limit both light levels and length of time on exhibit for any items that are susceptible to fading.
Two handsome volumes? Not anymore! Mold has ruined this two volume set. Books, paper items, paintings, textiles and anything else prone to degradation should not be stored in basements, attics, garages or sheds. These areas have wide ranging variations in temperature and relative humidity and are prone to flooding and pests. Store off the floor in safe, stable areas with temps 70 degrees or less, humidity around 50% and minimal light.
Magnetic media, CD's, DVD's, and LP's present many problems to libraries and historic institutions. Excessive heat in cars will melt plastics (below), dust and careless handling will scratch and damage LP's, DVD's and CD's (left), even mold will grow if the conditions are conducive (right). Most magnetic and digital media is best stored at around 65 degrees and between 25 and 45% relative humidity with good air circulation and low light levels. Store magnetic media, digital media, LP's etc. vertically to avoid shifting wound tapes or warping of discs.

Reeled magnetic media should always be stored rewound to the beginning to avoid distorting the tape. Handle discs at their edges and reel-to-reel tapes in the center. Sweat and oils from even clean hands can cause digital media to skip and hold dust and attract mold. Keep dust levels to a minimum in storage areas.
Textiles should be stored in temperatures between 65 and 70 degrees with humidity between 40 and 50%. Wrap textiles in unbuffered tissue or Tyvek (not plastic) and place in boxes to protect from light and pests. Soften folds with scrunched strips of tissue.

For textile storage supplies, see the Gaylord Archival Catalog. For more information on the safe storage of textiles, see the Gaylord Pathfinder #5.

Textiles are some of the most fragile objects found in historic repositories. Cotton, silk, wool, linen and other natural fabrics degrade quickly from use and are very susceptible to light, mold and insects. Wool is especially appealing to the larvae of such insects as clothes moths and carpet beetles. The larvae prefer temperatures of 75-80 degrees and humidity between 50 and 70% in a dark, undisturbed area. Regular cleaning of storage areas will help to discourage infestation.
Tape is a major problem in dealing with historic paper based collections. Many old pressure-sensitive tapes have made the paper go translucent, have discolored the paper so that reading is difficult, or have caused the paper to go very brittle. Tape degrades by oxidation. You will first notice "cold flow" or the adhesive oozing out from under the carrier, next, the paper will begin to turn brown and, finally, the adhesive will dessicate and the carrier will fall off. Once tape has begun to oxidize, make a copy for patron use and have the document or work of art treated by a professional conservator.

Tape is not the only damaging adhesive commonly found in paper based collections. Rubber cement also turns brown and dessicates so that scrapbook items, collages and cartoon panels (right) begin to fall apart.

For paper based items that are to be kept for the future, please, DO NOT use any sort of tape or non-reversible adhesive to repair it. Make a protective enclosure and contact a professional conservator.
Loss is a common problem in libraries and historic institutions. Whether through theft, misplacement, disaster, or use, on average, 10% of collections can be categorized as lost. Disaster aside, loss can be prevented with a little effort. Having policies in place for identifying when and where items removed from storage or exhibit go, having policies on patron and staff handling of materials, and having a security system in place for when the building is unoccupied (See the NEH grant information below) will greatly help reduce the loss of historically important, irreplaceable and valuable materials.
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CLRC
Central New York Library Resources Council
The Preservation Committee maintains the CLRC Preservation Resources Page [http://www.clrc.org/progs/preserv.shtml] with links and information about preserving library and archival collections. Donia Conn contributed the photographs, text and layout for the calendar.
Members of the CLRC Preservation Committee in 2003/2004 were:
  * Joanne McHugh, Chair, Utica College
  * Barbara Brookes, Utica Public Library
  * Donia Conn, Syracuse University
  * Kathy Corcoran, Munson-Williams Proctor Arts Institute
  * Susan Hughes, CLRC Regional Archivist
  * Colleen Kehoe-Robinson, Mohawk Valley Community College
  * Judith Rossoff, Liverpool Public Library
  * Jeannette Smithee, CLRC

Gaylord, in addition to products, provides information and resources for preserving and protecting library and archival collections. The Resources and Information section of the Gaylord web site [http://www.gaylord.com] includes many informational documents such as, "Protecting Documents, Prints, Drawings, Pamphlets, Magazines, Newspapers and Postcards."

The Gladys Krieble Delmas Foundation promotes the advancement and perpetuation of humanistic inquiry and artistic creativity by encouraging excellence in scholarship and in the performing arts, and by supporting research libraries and other institutions which transmit our cultural heritage. For more information, see: http://www.delmas.org

The New York State Library serves all New Yorkers with NOVEL: New York Online Virtual Electronic Library. New York State residents who would like to use the NOVEL Databases should contact their local public, academic or school library. Grant funds for promoting the NOVEL Databases assisted the printing and distribution of this calendar. "This publication was supported in part by Federal Library Services and Technology Act funds, awarded to the New York State Library by the Federal Institute of Museum and Library Services."

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