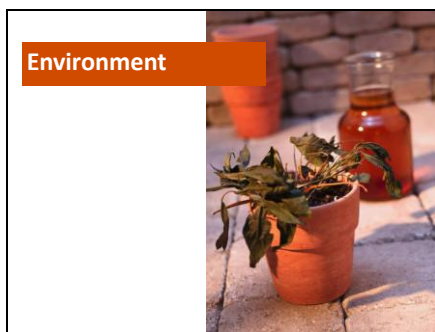


Slide 1



Welcome to Conservation Kitchen – Recipes for Disaster, the third installment in the Conservation Kitchen series.

Slide 2



Slide 3



Attics, basements, garages, and outdoor sheds are not good environments for your collections. Temperatures and relative humidity levels are too extreme, adequate circulation of air is lacking, and insects can thrive in these places, undisturbed by regular cleaning activities.

Slide 4



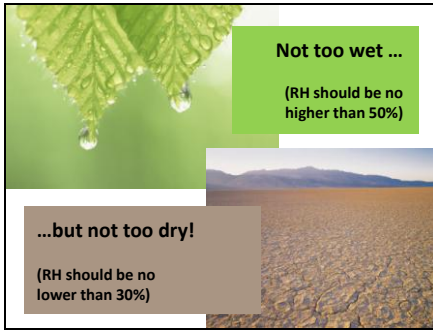
KEEP IT COOL!

If you can do it, 65° F or below is good. For some materials, such as film, photographic prints and negatives, and slides, frost-free frozen storage is beneficial and can extend their longevity. However, daguerreotypes, ambrotypes, and tintypes should not be placed in cold storage.

“Environmental Guidelines for the Storage of Paper Records” by William K. Wilson, a National Information Standards Organization (NISO) technical report (NISO TR01-1995), recommends on page 2 a maximum temperature of 70°F for combined stack and user areas, a maximum temperature of 65°F for closed stack areas, and an optimum temperature of between 35°F and 65°F for preservation stacks. More information about storage conditions for specific formats may be found at:

<http://www.niso.org/publications/tr/tr01.pdf>

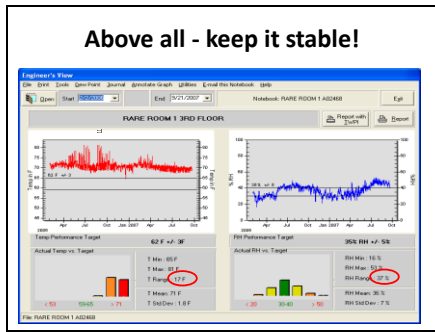
Slide 5



KEEP IT DRY!

For a mixed collection of materials, the NISO technical report recommends an environment of no more than 50% relative humidity, but not less than 30%. An environment that is too humid will encourage mold and insects; one that is too dry can make materials brittle.

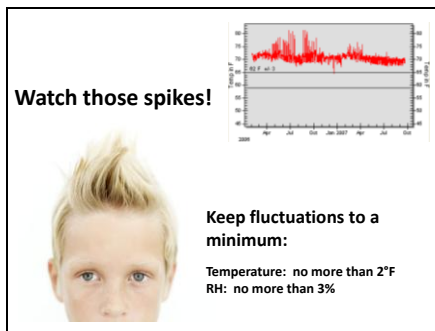
Slide 6



You can easily see problems in this collection. The line graphs show dramatically the extreme spikes in temperature as well as the fluctuations in both temperature and relative humidity. Organic materials deteriorate more rapidly with fluctuations in temperature and relative humidity. The Image Permanence Institute (IPI) has created an interactive tutorial that illustrates the effects of environment on collections. Explore it at:

<http://www.climatenotebook.org/games/StoredAlive.html>.

Slide 7



More information about suggested values for proper storage conditions for collections may be found in the technical report, "Environmental Guidelines for the Storage of Paper Records" by William K. Wilson, published by the National Information Standards Organization (NISO TR01-1995). It may be viewed online at

<http://www.niso.org/publications/tr/tr01.pdf>.

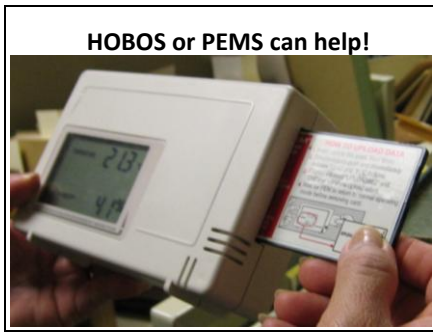
Keep it stable! Avoid fluctuations of more than 2° F and 3% relative humidity within a 24-hour period.

For low cost/no cost tips on climate control for collections, visit the Northeast Document Conservation Center (NEDCC):

[http://www.nedcc.org/resources/leaflets/2The_Environment/06LowCostNoCost.ph](http://www.nedcc.org/resources/leaflets/2The_Environment/06LowCostNoCost.pdf)

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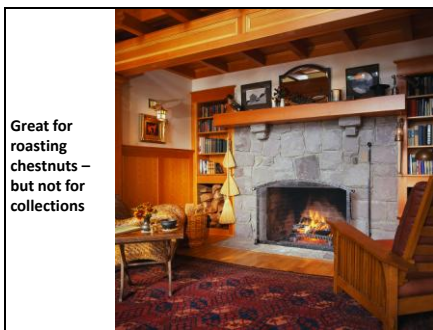
Slide 8



If you can afford them, environmental monitors allow you to track temperature and relative humidity levels over time. Examples may be found at:

- <http://www.onsetcomp.com>
(HOBO®)
- <http://www.pemdata.com/faq.asp>
(PEM – aka Preservation Environment Monitor)

Slide 9



Keep your collections away from sources of combustion, such as fireplaces and kitchens. Fluctuations in temperature and relative humidity as well as pollution from combustion will harm materials.

Make sure that furnace filters are cleaned or changed regularly and that air conditioning units are maintained – good for your collections, good for your budget!

Slide 10

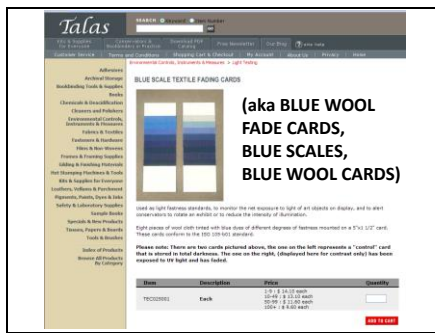


- Put your materials into protective, acid-free, lignin-free enclosures.
- If displaying an item, be sure to turn pages every week to minimize damage.
- Considering using facsimiles or digital copies for displays in lieu of originals.

KEEP IT DARK!

- Turn off the lights if you can.
- Try putting light switches on timers.
- Use curtains, shades, or blinds to block sunlight coming in through windows.
- Block UV and infrared light with UV filters.

Slide 11



Blue wool cards provide an inexpensive way to measure light damage. Damage is easily seen and can identify problem areas and demonstrate the need to fund UV filters, shades, heavy drapes, etc.

Cards are available from several vendors including Gaylord, Talas, and University Products.

Slide 12



DON'T TAKE YOUR COLLECTIONS ON A PICNIC!

Keep food and beverages in the kitchen. They invite infestations and accidents around collections.

Keep it clean! Be sure to wash and thoroughly dry your hands before handling any materials.

Slide 13



Wood, plywood, particleboard, and various finishes can outgas volatile acids that are harmful to collections. Oak is especially acidic and should not be used in shelving units for special collections.

Baked enamel also presents possible off-gassing problems if it has not been baked properly. White paint is especially problematic.

Powder-coated steel shelving is preferred. Anodized aluminum is ideal, but expensive!

Find out more about shelving materials on the NEDCC (Northeast Document Conservation Center) Web site at:

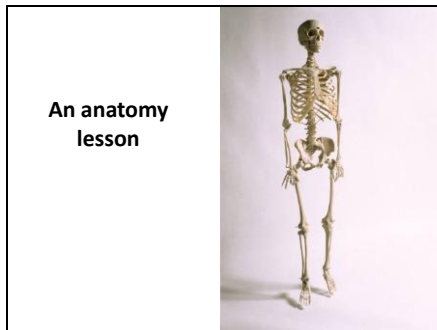
[http://www.nedcc.org/resources/leaflets/4Storage and Handling/O2StorageFurniture.php](http://www.nedcc.org/resources/leaflets/4Storage%20and%20Handling/O2StorageFurniture.php)

Slide 14

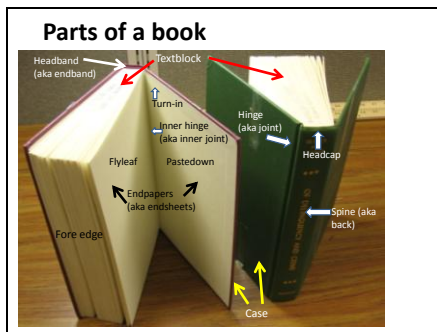


Chemicals and cleaning products can damage collections by off-gassing. Try to minimize the use of these around collection areas.

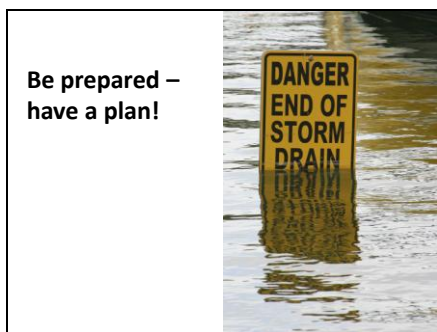
Slide 15



Slide 16



Slide 17



Think about what would happen to your collections if you became incapacitated or died. Will another family member become responsible for them? Have you made arrangements with a family heritage or historical society? Make a plan **now** and let others know about it!

Slide 18



WESTPAS (Western States and Territories Preservation Assistance Service) offers free workshops (funded by the National Endowment for the Humanities) on creating disaster plans. WESTPAS also provides online resources, including the template for the Pocket Response Plan (PRP) for Collections. The Pocket Response Plan may be found at the WESTPAS Documents Download page at:

http://www.westpas.org/course_docs.html

Slide 19



Fires, earthquakes, fallen trees, broken pipes – disasters are inevitable. Preparation minimizes damage and loss.

At the very least, be sure your disaster plan includes:

1. A phone tree with contact information for:

- Key members of staff, including your disaster team and the fiscal, IT, and facilities departments
- Key parent agency staff (if applicable)
- State and local emergency management agencies
- The FEMA regional office

- Local first responders (fire, police, local health department, Red Cross)
- Local utility providers (gas, electricity, water, telephone)
- Building owner (if applicable)
- Insurance contact
- Disaster recovery vendors
- Conservators
- A list of salvage priorities

2. Floor plans with location of fire extinguishers, hoses, fire suppression systems, control panels/shut off valves for electrical, HVAC, elevators, water, and salvage priority locations clearly identified.

3. Check lists covering immediate response actions and collection salvage activities.

The PReP plan makes this easy!

Slide 20



Have an open house. Invite local first responders for a tour of your facility and show them your areas of greatest concern (i.e., salvage priorities).

Or, go to them with coffee and donuts and a copy of your disaster plan and floor plans. Get to know them **before** an emergency happens.

Slide 21

Act quickly to avoid big problems!



Don't let a small problem turn into a major disaster! Monitor your collections regularly. Take immediate action if you see:

- Leaks
- Signs of insects, mice, or other "visitors"
- Mold

Read about threats to collections at:

http://nedcc.org/resources/leaflets/3Emergency_Management/01ProtectionFromLoss.php

Find out more about integrated pest management at:

http://nedcc.org/resources/leaflets/3Emergency_Management/10PestManagement.php

Find out more about mold at:

http://www.nedcc.org/resources/leaflets/3Emergency_Management/08SalvageMoldyBooks.php

Slide 22

Care and handling

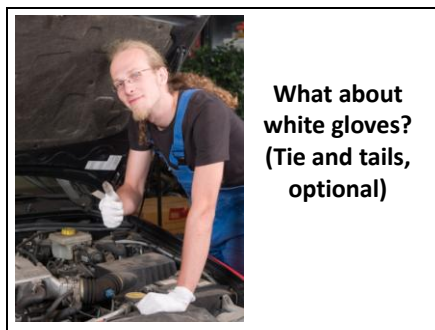


Slide 23



DON'T TAKE YOUR COLLECTIONS FOR A REST STOP!

Slide 24



White gloves are no longer considered essential for handling most paper-based materials such as books, maps, and manuscripts. Additional damage can be caused as fragile items are “pawed” with glove-covered fingers. However, if you are

not using gloves, be sure to thoroughly wash and dry your hands before handling collections.

However, gloves are a **MUST** for handling photographic materials.

- Gloves should be clean and lint-free. Nitrile gloves are a good alternative to cotton.
- Be sure to handle photographs only on the edges.
- Be sure to support to the back of photographs to avoid flexing them.
- **DO NOT TOUCH THE SURFACE OF THE IMAGE!**

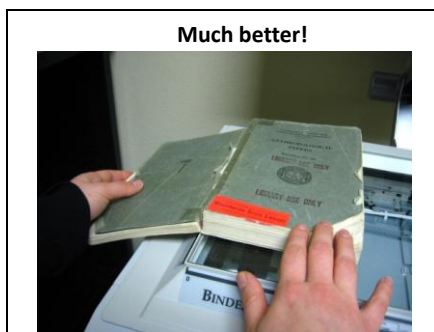
Slide 25



NEED A COPY?

Photocopiers can cause damage to materials, especially those that are brittle.

Slide 26



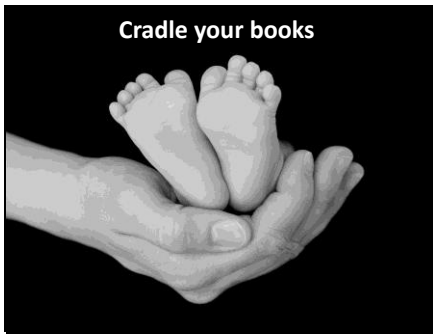
Some photocopiers have been designed to allow copying while providing minimum stress on the binding of the book.

Slide 27



Instead, take a picture! A simple setup may be made using a digital camera mounted on a camera stand. Be sure to turn off the flash to minimize light exposure to the book. To photograph your book, place it into a book cradle.

Slide 28



A book cradle provides gentle support to a book's spine and case (covers).

Some book scanners have been designed with book cradles that allow materials to be scanned without damaging their spines.

Slide 29



Book cradles allow items to be used or displayed with minimal stress on the binding. Cradles may be purchased from vendors such as University Products and Gaylord. Straps made from 2 mil polyester (Melinex® 516) can be used to keep the exhibited book open for viewing.

Detailed, illustrated instructions for making an adjustable book cradle may be found in Volume Four (1985) of the Book and Paper

Group Annual, "An Adjustable Book Cradle Design" by Jane Beeson Boyd. They are available online at

<http://www.cool.conservaion-us.org/coolaic/sg/bpg/annual/v04/bp04-01.html>.

The National Park Service has updated plans originally appearing in the *Abbey Newsletter* (Vol. 14, No. 3) showing how to make a polyester book cradle for displaying small books. You can find their plans at: <http://www.nps.gov/history/museum/publications/conservoogram/18-01.pdf>

A very low cost, quick cradle may be improvised by placing books underneath the front and back covers of the book that is being viewed. An alternative is to use two rolled up small towels to support the covers.

REMINDER – If you are putting books on display, remember to turn the pages weekly to minimize fading.

Slide 30



Always handle materials with care to avoid damage! When holding a book, be sure to give it adequate support.

Slide 31



Always shelve with care! When shelving, use a bookend of sufficient size and strength to adequately support books on the shelf.

The depth of the shelf should fully support the books shelved on it.

Slide 32



OUCH!!

As you can see, the result is a damaged spine.

To avoid damage, slightly push back on the spines of the books on either side of the one you wish to pull out.

Grasp the desired book on either side of its spine and pull out.

Always remember: **DO NO HARM!**

Slide 33



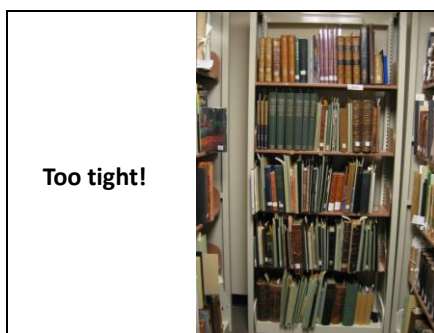
When a book is shelved on its fore edge, the weight of the text block will cause it to pull away from the book's case. The result is distortion to the text block, loose and/or broken hinges, and repairs that could have been avoided. If it is impractical to raise the height of the shelves, shelve books on their spines to prevent damage.

Slide 34



CRUNCH!

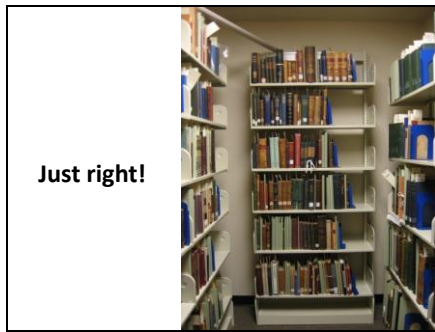
Slide 35



Let your collections breathe! Allow adequate circulation of air, including at least 3 inches between the wall and the book. If possible, try to avoid shelving books (or placing other materials) on an outside wall, especially in older buildings that are not fully insulated.

Be sure shelving adequately supports materials. Books that jut out beyond the edge of the shelf can be damaged.

Slide 36



Use bookends that correspond in size to the materials they are supporting (i.e., short bookends for small books, tall, flange-reinforced bookends for tall, heavy books) to ensure that books do not lean. Shelf like-sized materials together (i.e., small books with small books, oversized books with oversized books, folios with folios).

Slide 37



Some materials do not do well shelved next to each other. Problems can arise with the following:

- Leather books shelved next to books that have paper and cloth bindings. Acids can migrate from the leather into the paper and cloth.
- Deteriorating leather can soil neighboring volumes. To avoid this problem:

- Put uniquely-bound volumes into protective, custom-fitted boxes or
- Shelf paper and cloth bound books apart from leather-bound materials or
- Insert a sheet of Melinex® 516 (Mylar) between the volumes or
- Use book shoes for leather volumes

Some books have unique bindings that may involve metal clasps, raised stone cameos, and other features that can damage nearby volumes or that can be damaged through abrasion. If possible, put these into protective, custom-fitted boxes.

Slide 38



Although custom-fitted boxes that totally encase volumes provide the best protection, there are times when it may be necessary to forego such enclosures for aesthetic reasons. While book shoes may not provide a protective microclimate where dust, light damage, and pollutants

are greatly diminished, they do provide additional support for a book's structure and can protect it from physical abrasion.

For more information about book shoes, read the NEDCC preservation leaflet, "The Book Shoe: Description and Uses" at:

http://www.nedcc.org/resources/leaflets/4Storage_and_Handling/07BookShoe.php

Slide 39



Viewed on 28 February 2012 at:

<http://bookandpaperconservation.blogspot.com/search/label/Lennox%20Fellowship%20Work>

Slide 40

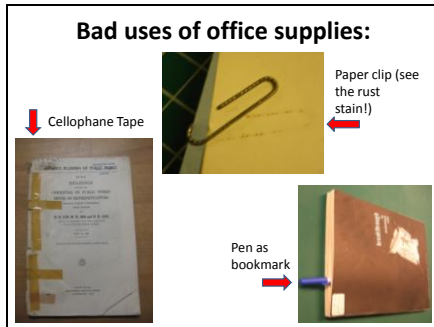


AVOID OFFICE SUPPLIES!

Never use any of the following on materials you care about:

- Paper clips
- Binder clips
- Staples
- String
- Twine
- Rubber bands
- Tape (e.g., cellophane, "Magic," book tape, duct tape, etc.)
- Non-PVA (polyvinyl acetate) glue, rubber cement, airplane glue
- Removable notes (aka "yellow stickies")
- Construction paper and cardboard, including corrugated cardboard boxes
- Kraft envelopes
- Standard office file folders
- Report covers and PVC (polyvinylchloride) enclosures

Slide 41



Just a few of the many examples...

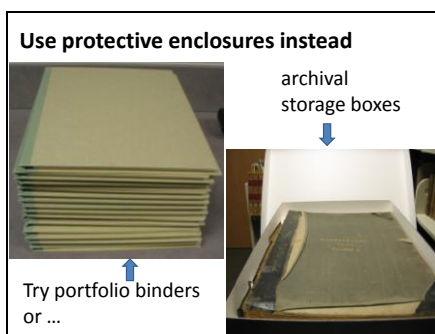
Slide 42



NEVER USE TWINE! It slices and dices collections.

These would do better in protective enclosures.

Slide 43



Slide 44



LEAVE LEATHER DRESSING TO CONSERVATORS!

Although past practice was to use a leather dressing on deteriorating bindings, this is no longer recommended. It can:

- Cause leather to dry out
- Result in uneven staining
- Darken leather
- Cause leather to stiffen
- Leave a sticky residue that attracts dust
- Stain the pages through migration

For in-depth information about leather and parchment, visit the Iron Gall Ink Website:

<http://ink-corrosion.org>

Slide 45



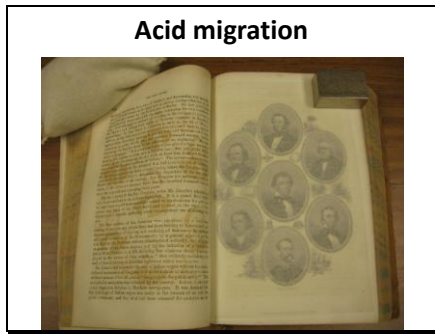
Put it into a protective enclosure.

Slide 46



Tape can stain, leave a residue, distort, and damage surrounding materials as adhesive oozes out. Removing tape can cause additional damage to the items it was meant to "repair." Tape can also cause damage through acid migration.

Slide 47



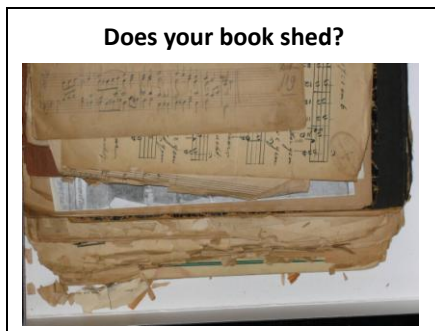
Acid migration

Acid migrates. Books and other paper materials are threatened by contact with, and by proximity to, acidic materials including ink, paper products, glues, and leathers.

Some of the things that can stain and deteriorate your books, maps, art work, and documents include:

- Bookplates
- Ink – especially iron gall ink. Read more about the damage caused by acidic ink, as well as poor practices, that damage family papers and other materials at:
<http://dlis.dos.state.fl.us/archives/preservation/Papers/index.cfm>
- Newspaper clippings
- Enclosures that are not acid-free or that have an acidic core
- Construction paper
- Cardboard, including corrugated cartons
- Many glues, tapes, and similar adhesives
- Wood, especially oak
- Leather
- Mats used to frame art work and photographs (“mat burn”)
- Dust jackets
- Bookmarks
- Pressed flowers

Slide 48



Does your book shed?

If your book sheds little flakes of paper whenever you touch it, or if the corners readily break off, you have a brittle book. Why? The manufacturing process that created the paper used to make the book is contributing to its destruction. Poor storage conditions, such as high temperatures and fluctuations in temperature and relative humidity, can accelerate the process. Little can be done to treat such an item.

If it is unique, explore the possibility of capturing the information by digitizing or microfilming. Use a book cradle!

Put the original into an acid-free, buffered phase box – and keep it cool and dry! This protects the item from further mechanical damage and will provide a friendlier microclimate that will slow down deterioration of the item.

If you have a chance, watch the film *Slow Fires: On the Preservation of the Human Record*. A description of the film may be found at

http://www.americanfilmfoundation.com/order/slow_fires.shtml.

Slide 49



Like the terms "natural" and "organic," the phrase "archival quality" can be misleading. As stated in "PRESERVATION 101" by the Northeast Document Conservation Center:

"When choosing storage enclosures, "archival" and "acid-free" are two terms that you will frequently encounter. There are no standards governing the use of these terms, and they are sometimes misused, so read suppliers' catalogs carefully. If there are questions about a product, ask the supplier for details. If that information is not forthcoming, find another supplier."

Materials used to repair valuable or historically significant items should be chemically stable, acid-free, and reversible. Although some materials, such as glues and tapes, may be labeled as acid-free or pH-Neutral, they may not necessarily be chemically stable or reversible and should not be used on special collections or artifacts.

See NEDCC's preservation leaflet, "Repairing Paper Artifacts" for additional information:

<http://www.nedcc.org/resources/leaflets/7ConservationProcedures/03RepairingPaperArtifacts.php>

Note: **Do not** use glassine. It weakens and distorts over time.

Ready-made enclosures should be sturdy enough to provide proper support for the item, large enough to be a good fit, but not so large that the material is damaged as it "bounces" around inside of the enclosure or is so poorly supported that it becomes distorted.

Slide 50

What to Look For

For "plastic" film, sleeves, etc.:

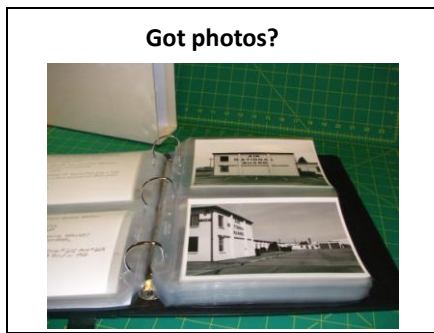
- Should be "Melinex^o 516" or "Mylar D"
- "Passed P.A.T." (Photographic Activity Test) for photographic materials

Find out more by reading "Buzzwords in the archival industry – or – Caveat emptor, let the buyer beware" at <http://dis.dos.state.fl.us/archives/preservation/Buzzwords/index.cfm>

For paper or board:

- "Permanent" or "permanent durable" ("acid-free")
- pH of between 7.0 and 8.5 throughout – not just a veneer!
- Low lignin (also called lignin-free)
- Chemically purified
- Buffered (usually 3% calcium carbonate) – but **do not use for alkaline-sensitive materials**
- Meets requirements of ANSI/NISO Z39.48-1992 ("Standard for Permanence of Paper for Publications and Documents in Libraries and Archives")
- "Passed P.A.T." (Photographic Activity Test) for photographic materials

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If digitization is not an option, but photographs need to be available for use, try putting them into polyester sleeves (aka Melinex^o 516) and housing the sleeves in archival-quality albums.

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A sampling of suppliers:

Vendor	URL	Phone #
Archival Products	http://www.archival.com	1-800-526-5640
Bookmakers, Inc.	http://www.bookmakerscatalog.com	1-301-345-7979
Custom Manufacturing Inc. (CMI) – phase boxes	http://www.archivalboxes.com	1-607-569-2738
Gaylord	http://www.gaylord.com	1-800-962-9580
Hollinger Metal Edge	http://www.hollingermetaledge.com	1-800-862-2228
Light Impressions	http://www.lightimpressionsdirect.com	1-800-975-6429
Museum Services Corporation	http://www.museumservicescorporation.com	1-651-450-8954
Talas	http://www.talasonline.com	1-212-219-0770
University Products	http://www.universityproducts.com	1-800-628-1912

Shop around and compare prices, but be sure that what you buy will protect, rather than harm, your collections.

Remember, if a bargain sounds too good to be true, it probably is!

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First rule – DO NO HARM!

Slide 54



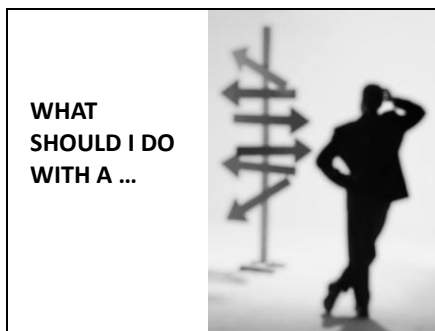
Remember the first rule – **DO NO HARM!**

Don't do anything that you can't undo.
If in doubt, consult with a conservator.

You can find a conservator at the following Web site:

<http://www.conservation-us.org>

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Slide 56

Rare book?

First option:

find a conservator!



www.conservation-us.org

If the item is unique, explore the possibility of scanning or microfilming to capture the information.

If funds are available, have it restored by book conservator. The American Institute for the Conservation of Historic and Artistic Works

(<http://www.conservation-us.org>)

provides guidance on choosing a conservator and has a free searchable database of professional conservators on its Web site.

Slide 57

Second option:

Box it!



Before:  **After:** 

Second choice: If no funds are available, protect it with a drop-spine box (aka clamshell or double-tray box) or a phase box. These books have been placed in custom-fitted drop-spine boxes, which offer more protection than phase boxes.

For more information about custom-fitted boxes, go to:

[http://www.nedcc.org/resources/leaflets/4Storage and Handling/05ProtectingBooks.php](http://www.nedcc.org/resources/leaflets/4Storage%20and%20Handling/05ProtectingBooks.php)

Slide 58



Third choice: Keep the book together with a polyester strap secured with Velcro buttons or tie with flat linen or cotton tape. If using flat linen or cotton tape, make sure that your knot is at the top or the fore edge of the book.

Slide 59



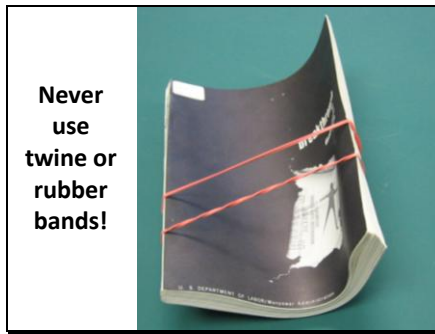
This keeps the volume together, while at the same time affording some protection from light, abrasion, and dust.

Slide 60



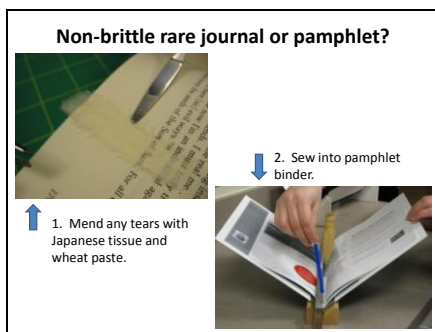
- If damaged and in need of stabilization, consult with conservator.
- If item is unique, try to capture information by scanning or microfilming.
- Put the original in an acid-free, buffered portfolio binder of appropriate size and keep it cool!

Slide 61



As you can see, the result is distortion. If this were a brittle item, damage would be considerable.

Slide 62



If damaged, mend with wheat paste and Japanese tissue. (See “Conservation Kitchen: Basic Tools for Any Preservation Recipe”)*

Put into acid-free, buffered portfolio binder or hand sew into pamphlet binder. (See “Conservation Kitchen: Wraps, Jackets, and Boxed Treats”)*

*For multiple viewing options for the “Conservation Kitchen” series, see slides #83 – 86 of this presentation.

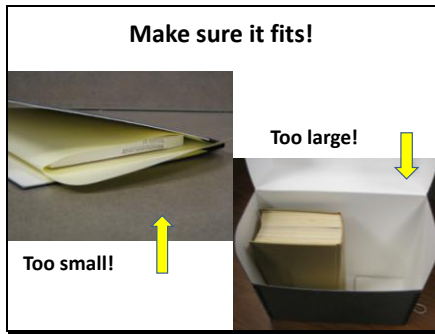
Slide 63



If damaged, repair with document repair tape.

Optional: If heavy use is anticipated, staple into pamphlet binding or work with a bindery that is a member of the Library Binding Institute (LBI) to have the item wire stitched into a Melinex® 516 and board binder.

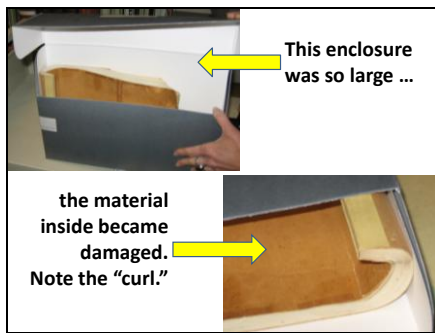
Slide 64



The enclosure on the left is too small for the item. It will not close properly.

The enclosure on the right is too large. The item inside will “bounce” around whenever it is moved.

Slide 65



Slide 66



Before proceeding, consult with a professional conservator if:

- The item needs cleaning
- The item is damaged and in need of stabilization
- The item is extremely brittle and/or fragile
- The item is very tightly rolled
- The item is rolled or folded and is

brittle

If the item is rolled or folded and not brittle, gently unroll or unfold it.

If the item is unique, try to capture the information by scanning or microfilming.

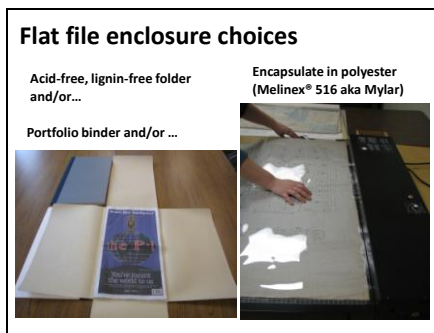
Enclose the item to:

- Protect it from physical damage, and
- Provide a friendlier microclimate to slow down deterioration.

For more information about flat files, including the storage of extremely large items, go to:

http://www.nedcc.org/resources/leaflets/4Storage_and_Handling/09OversizedArtifacts.php

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CHOICES:

1. Put into acid-free, lignin-free map folder of appropriate size

Advantages:

- Relatively inexpensive
- Good for infrequently handled materials

Disadvantages:

- Ready-made folders come in limited range of sizes
- Does not provide as much protection
- Materials may fall out of folders
- Folder does not provide as much physical protection as portfolio binder boards

2. Put into portfolio binder

Advantages:

- Less expensive than encapsulation

DO NOT USE BUFFERED ENCLOSURES FOR ALKALINE-SENSITIVE MATERIALS SUCH AS BLUEPRINTS. [More about this when I cover cyanotypes, blueprints, and other alkaline-sensitive materials.]

Put into Melinex® 516 (formerly Mylar) enclosure

- Good for infrequently handled materials
- Boards provide physical protection

Disadvantages:

- Ready-made binders come in limited range of sizes
- Takes up more shelf space

DO NOT USE MELINEX ENCLOSURES FOR FRIABLE OR BRITTLE MATERIALS. [More about this when I cover friable materials.]

Advantages:

- Image can easily be seen through enclosure
- Material is protected from damage by frequent handling
- Good option for alkaline-sensitive materials

Disadvantages:

- Can only be used for non-brittle and non-friable materials (i.e., media used to create the print or image would

- not smear or be affected by static electricity of polyester)
- May require flat file cabinets for storage if you have very large items and/or a considerable quantity of materials

The NEDCC has noted that:

“Research at the Library of Congress has also found that acidic papers deteriorate faster within a closed environment such as a polyester envelope. Because most old untreated papers are acidic to some extent, objects should be deacidified or washed to remove accumulated acid in the paper before encapsulation. Washing or deacidification must be done by a conservator. When this treatment is not possible, a sheet of buffered paper in the polyester envelope placed behind the object can be helpful. Leaving the corners of an encapsulation unsealed is of little, if any, use in protecting the contents from accelerated acid deterioration. “ (Preservation Leaflet: “STORAGE AND HANDLING, 4.9 Storage Solutions for Oversized Paper Artifacts”

–
http://www.nedcc.org/resources/leaflets/4Storage_and_Handling/09OversizedArtifacts.php)

For extra protection:

If the item is relatively small and non-friable, you can encapsulate it AND put it into a portfolio binder:

- Good if you have only a small number of small flat files
- Provides additional physical protection for the material

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Book tape was used to laminate this original 1879 map. Rather than providing protection, the tape has damaged the map.

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For a how-to, watch “Conservation Kitchen: Wraps, Jackets, and Boxed Treats”

http://www.sos.wa.gov/library/video/part2_chapter2.aspx

The National Park Service provides instructions for polyester encapsulation using double-sided tape in a Conserve O Gram:

<http://www.nps.gov/history/museum/publications/consveogram/13-03.pdf>

The NEDCC offers some caveats related to encapsulation:

“Polyester film can be sealed by equipment that forms either an ultrasonic or a heat-activated weld. If the equipment required for this welding is not available, polyester sleeves can be purchased from conservation suppliers. Double-sided tape to seal polyester sleeves is not recommended as adhesives flow over time and can damage artifacts that the polyester is meant to protect.” (Preservation Leaflet: “STORAGE AND HANDLING, 4.4 Storage Enclosures for Books and Artifacts on Paper” -

http://www.nedcc.org/resources/leaflets/4Storage_and_Handling/04StorageEnclosures.php

Tip- Round the corners of the completed encapsulation with a corner rounder. If you cannot afford a corner rounder, use an art knife and a quarter.

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What about friable materials?



<http://www.cci-icc.gc.ca/publications/notes/10-17-eng.aspx>

If you have drawings done in pencil, chalk, charcoal, pastels, or materials with images or content that is flaking off due to deterioration, put each item into **unbuffered**, pH neutral, shallow boxes or into a sink mat.

CAUTION :

DO NOT PUT THESE MATERIALS INTO POLYESTER (MELINEX® 516 OR MYLAR® D) ENCLOSURES. THE STATIC ELECTRICITY GENERATED BY THE POLYESTER WILL PULL THE FRIABLE MEDIA AWAY FROM ITS BACKING.

DO NOT ALLOW THE SURFACE OF THE ITEM TO COME INTO CONTACT WITH:

- ITS ENCLOSURE
- ANOTHER ITEM OR
- YOUR HAND!

Find out more about encapsulation and friable media at:

<http://www.cci-icc.gc.ca/publications/notes/10-17-eng.aspx>

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Avoid using buffered enclosures for materials that are alkaline-sensitive. Fading of images and damage to materials may be the result.

DO NOT USE ENCLOSURES THAT ARE **BUFFERED** FOR:

Most photographs
Albumin prints
Blueprints
Cyanotypes
Diazotypes
Works of art containing alkaline-sensitive pigments
Textiles (dyes may be alkaline-sensitive)
Wool
Silk
Feathers

TIP – If you are ever in doubt, choose acid-free, lignin-free **unbuffered** enclosures over buffered.

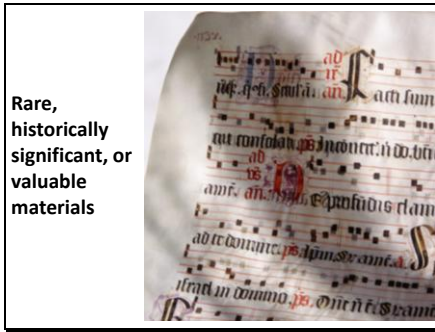
The National Park Service provides more information in Conserve O Gram #19/9 at:

<http://www.nps.gov/museum/publications/conservoogram/19-09.pdf>

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Leave these to the experts. Find a conservator at:

<http://www.conservation-us.org>.

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Never remove a daguerreotype from its case! The fragility of the image has been compared to a butterfly's wing. Bring in an expert!

Find a photographic preservation specialist at the American Institute for the Conservation of Historic and Artistic Works (AIC) at:

<http://www.conservation-us.org>.

Never try to fix photographs yourself – consult a conservator!

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- Damage surrounding materials, including books
- Cause serious health problems for anyone subject to repeated exposure to the gases

Cellulose nitrate that has deteriorated is extremely flammable and will even burn under water!

Fumes from burning cellulose nitrate are deadly!

For more information about cellulose nitrate, see:

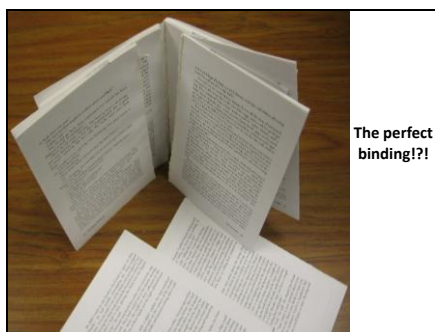
<http://www.nps.gov/history/museum/publications/MHI/AppendM.pdf>

Cellulose nitrate, also known as “nitrocellulose,” was commonly used for motion picture film and still photographic negatives from 1910 until 1950. It can be explosive and deadly!

Acidic off-gassing, which produces highly acidic gases such as nitric oxide and nitrogen dioxide as cellulose nitrate

deteriorates, can:

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Although this is referred to as a “perfect binding,” it is anything but perfect. Typically, single pages begin to fall out, followed by entire sections. Although you may tip in the loose pages, more will continue to fall out. If this title is to remain in the collection:

- Ask the publisher for a replacement copy at no cost to your library.
- Have double-fan adhesive bound by a member of Hardcover Binders International (HBI) (formerly Library Binding Institute (LBI)). HBI ensures that its members adhere to the highest standards in binding practices. For a list of HBI/LBI certified binders, go to:

<http://www.lbibinders.org/mc/page.do?sitePageId=114152>

The double-fan adhesive method involves fanning the edges of the pages along the spine in either direction while polyvinyl acetate (a cold adhesive) is applied on both sides of the page edges. The result is a strong and flexible binding. A detailed description of the double-fan adhesive process may be found in ANSI/NISO/LBI Z39.78-2000, which may be viewed for free online at:

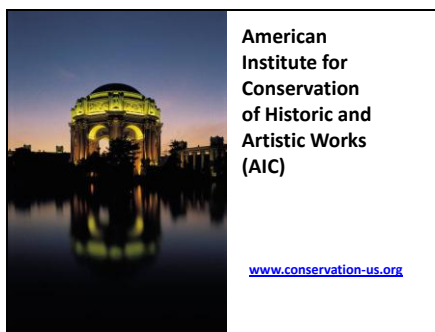
<http://www.niso.org/kst/reports/standards>

(Search for the standard in the “Designation” box, using the designation number Z39.78. Click on “View Details” and then scroll down to the hyperlink for the Final Document in pdf.)

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American Institute for Conservation of Historic & Artistic Works (AIC)

Includes information on caring for collections and finding a conservator. AIC also hosts the mega online preservation site, Conservation Online (CoOL).

<http://www.conservation-us.org>

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The National Information Standards Organization (NISO) has developed several standards related to preservation. They may be viewed online at

<http://www.niso.org/kst/reports/standards>

To access, scroll down until you see the title you wish to view and then click on “[View Details.](#)” When the Details screen appears, click on the hyperlink for the “[Final Document \(PDF\)](#)” at the bottom of the page. There is no charge for viewing the standards online.

Z39.48 “Permanence of Paper for Publications and Documents in Libraries and Archives”

Z39.77 “Guidelines for Information About Preservation Products”

Z39.78 “Library Binding”

Z39.79 “Environmental Conditions for Exhibiting Library and Archival Materials”

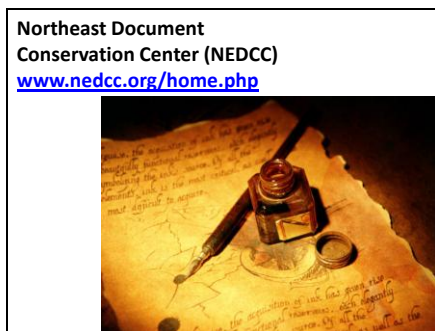
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The National Park Service “Conserve O Grams” cover a broad range of topics relevant to libraries, archives, historical societies, and museums in user-friendly leaflets. Check them out at:

http://www.nps.gov/history/museum/publications/conserveogram/cons_toc.html

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The Northeast Document Conservation Center (NEDCC) offers training; professional consultation; the free online disaster planning tool, dPlan; as well as online leaflets on a wide array of preservation and conservation topics.

<http://www.nedcc.org/home.php>

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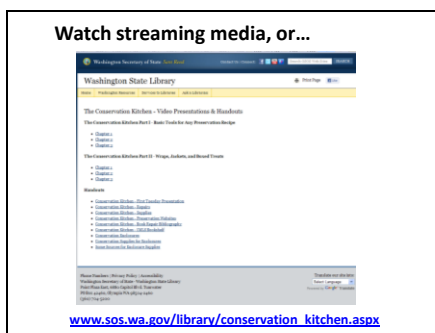
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WSL call number:

NW DVD 025.7 CONSERV 2008

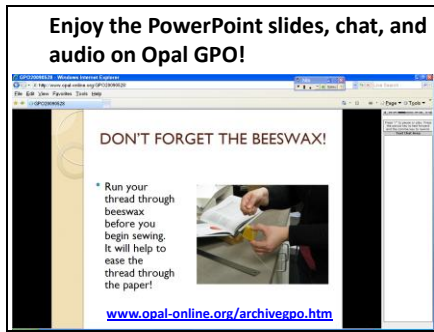
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Video recordings of both of the first two Conservation Kitchen modules, “Basic Tools for Any Preservation Recipe” and “Wraps, Jackets, and Boxed Treats,” are available online at:

http://www.sos.wa.gov/library/conservation_kitchen.aspx

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The Conservation Kitchen, “Basic Tools for Any Preservation Recipe” and “Wraps, Jackets, and Boxed Treats,” can also be viewed as PowerPoint slideshows, complete with chat and audio, recorded from online presentations to Federal depository librarians. Go to <http://www.opal-online.org/archivegpo.htm> and scroll down until you find them.

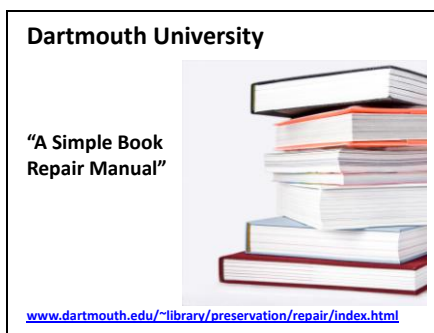
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Visit the Conference Wiki at:

<http://wlma2010.wikispaces.com/RecipesForDisaster>


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Provides detailed information on book repair, with hyperlinks to photographs that illustrate terms and techniques.

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Alaska State Library

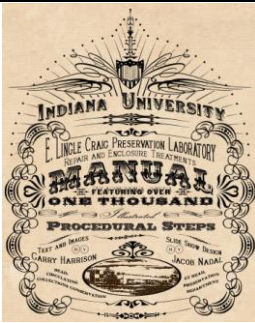


“Conservation Book Repair: A training manual” by Artemis BonaDea
www.library.state.ak.us/hist/conman.html

“Conservation Book Repair: A Training Manual,” by Artemis BonaDea and illustrated by Alexandria Prentiss, provides detailed instructions for a wide array of treatments.

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Indiana University
www.indiana.edu/~libpres/



The E. Lingle Craig Preservation Lab of Indiana University has created the “Repair and Enclosure Treatments Manual,” featuring slideshows that illustrate, step-by-step, how to make repairs and enclosures. It also provides information and photographs of conservation tools and equipment.

<http://www.indiana.edu/~libpres/>

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Caring for family treasures

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Cornell University

"Preserving Books in Your Home Library"



www.library.cornell.edu/preservation/publications/PreservingBooks.pdf

A well-illustrated, attractive guide to book construction and the care and maintenance of books from the Conservation Lab at Cornell University.

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Library of Congress



www.loc.gov/preserv/familytreasures/index.html

Read "Preparing, Protecting, Preserving Family Treasures" for the basics on topics such as "Storage," "Insurance," "Displaying," and what to do if disaster strikes.

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National Archives


www.archives.gov/preservation/family-archives/



"Caring for Your Family Archives" offers helpful information on caring for your personal collections.

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Florida Department of State, Division of Library and Information Services



<http://dlis.dos.state.fl.us/archives/preservation/index.cfm>

The Florida Department of State, Division of Library and Information Services, provides information on protecting family treasures, arranged by format, including CDs and DVDs, video and audio tapes, floppy disks, photographs, newspapers and clippings, scrapbooks, and family papers. They also have tips on making archival scrapbooks. Visit their “Preservation and Conservation” page at:

<http://dlis.dos.state.fl.us/archives/preservation/index.cfm>

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Northeast Document Conservation Center (NEDCC)
“Hints for Preserving Family Collections”



<http://www.nedcc.org/resources/resources.php>

Includes tips on caring for heirlooms, including proper environment, types of enclosures, and sources of preservation supplies.

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Spread the word!

www.ala.org/alcts/confevents/preswk



Questions?



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