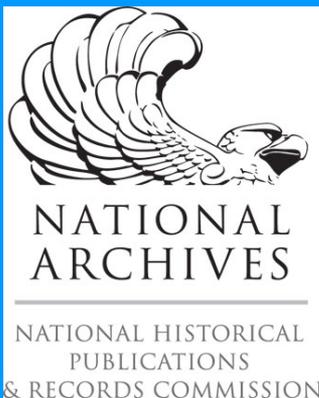




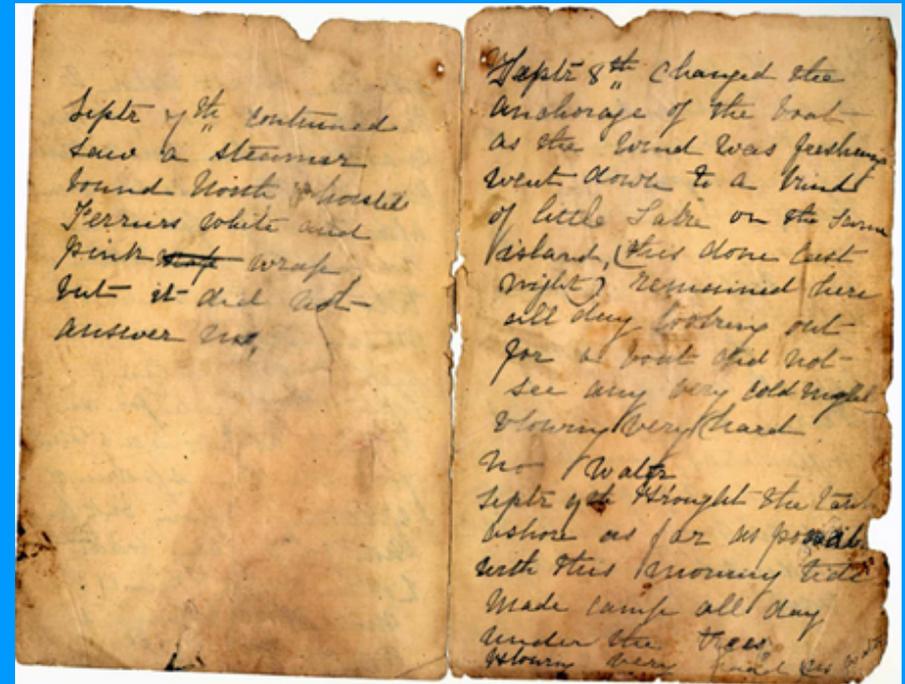
FUNDAMENTALS OF ARCHIVAL PRESERVATION



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University of Alaska Anchorage
Alaska State Historical Records Advisory Board
April 25, 2013

What causes paper to degrade?

- The nature of paper!
- Acidity (ph=7) makes paper brittle
- Inks
- Colored or dyed paper
- Chemicals in copied paper
- Exposure to heat and/or moisture
- Glues, tape, other adhesives, staples, paper clips
- Contact with other unstable, acidic materials
- Handling and use



What causes photographs to degrade?

- Exposure to light
- Exposure to chemicals and gases
- Exposure to heat
- Exposure to moisture
- Poorly fixed chemicals in photo
- Glues, tape, other adhesives, staples, paper clips
- Contact with other unstable, acidic materials
- Handling and use





Bad Storage Conditions for Archival Materials

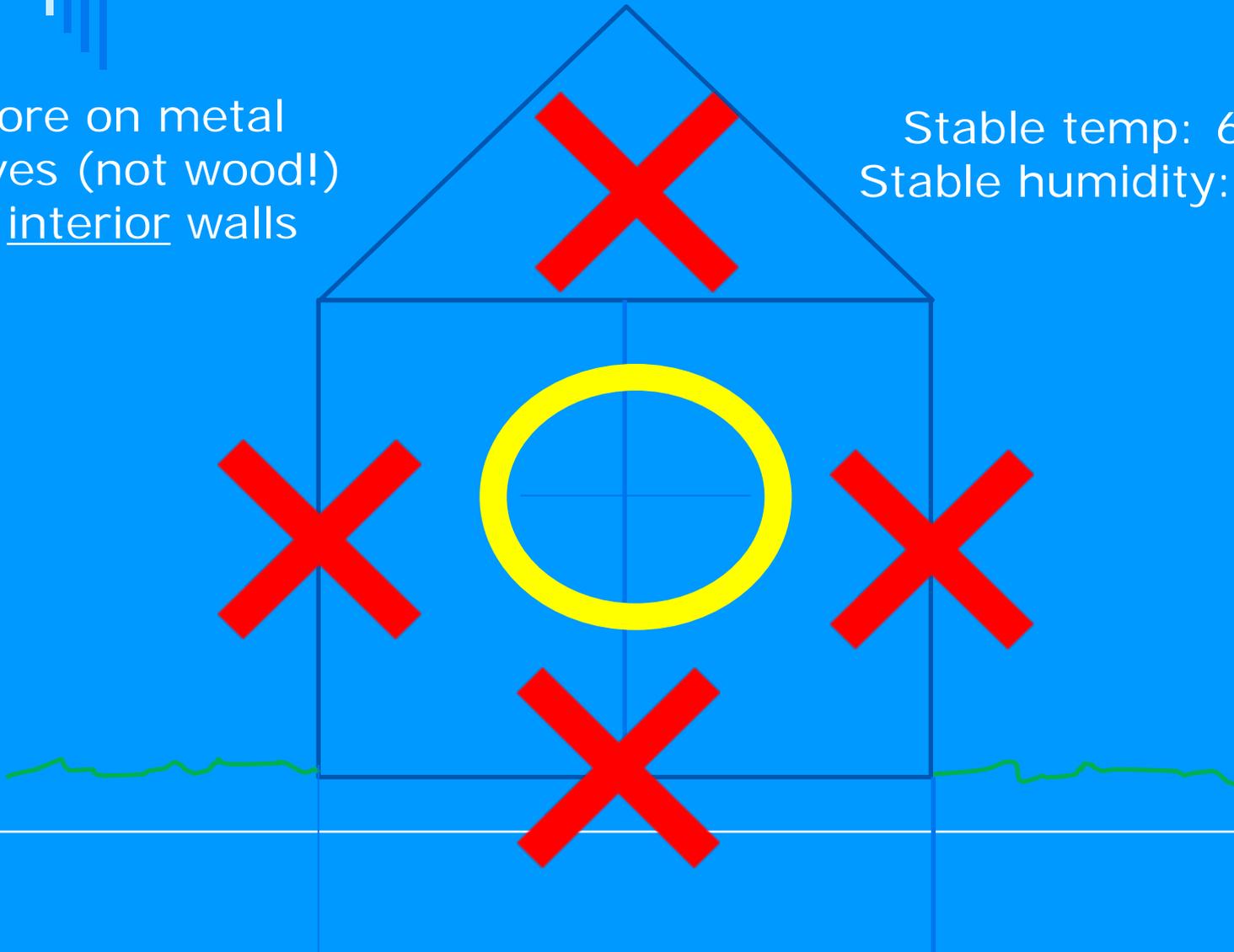
- ❖ High temperature
- ❖ High humidity
- ❖ Big swings in temperature/humidity
- ❖ Lots of light, dirt, and/or dust
- ❖ Mold or mildew growth
- ❖ Near heaters, washers, water pipes, copy machines, food, drinks, or plants
- ❖ Exposure to pollutants or chemicals

NO GARAGES AND USUALLY NO BASEMENTS OR ATTICS

Good Storage Conditions for Most Archival Materials

Store on metal shelves (not wood!) on interior walls

Stable temp: 66-68 F
Stable humidity: 35-50%



Other Considerations

- Monitor humidity with a hygrothermograph
- Store away from pipes, windows, drains, heat sources, & chemicals
- DO NOT store materials directly on floor or on top of shelves
- Consider these questions: Will the shelves hold the weight of the boxes? Are the shelves earthquake-resistant?



Storage Enclosures: Acid-Free, Lignin-Free Boxes



Letter or legal-sized document
boxes



Record cartons (1 cubic foot)



Oversize boxes

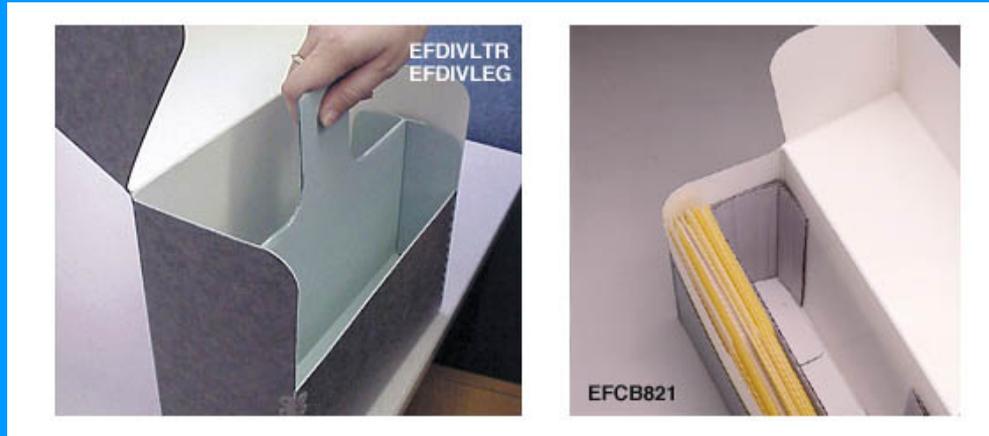
Storage Enclosures: Acid-Free, Lignin-Free Folders



Use appropriate-sized folders
for documents:

- Letter size
- Legal size
- Oversize

General Rules for Storing Archival Materials



- Always fill boxes - or use spacers to fill up extra space (see photo)
 - Do not overflow boxes or folders
- Do not cut out or remove materials from bound volumes or scrapbooks except when documents are in 3-ring binders with no historical value
 - Remove rusted paperclips, staples, or other metal fasteners
 - Store bound volumes flat on side on shelf or in oversize boxes
- Do not cut, fold, or otherwise alter the record to fit inside of the box

Special Storage Conditions: Oversize Materials

Maps, posters, blueprints, & other oversize manuscript material may not be able to fit into a folder or document box.



Use flat files to store
oversize documents...

...or use map tubes for rolled
oversize documents.

Do not roll up documents that were originally flat!

Special Storage Conditions: Photographs

Envelopes?

Available in buffered
and unbuffered.

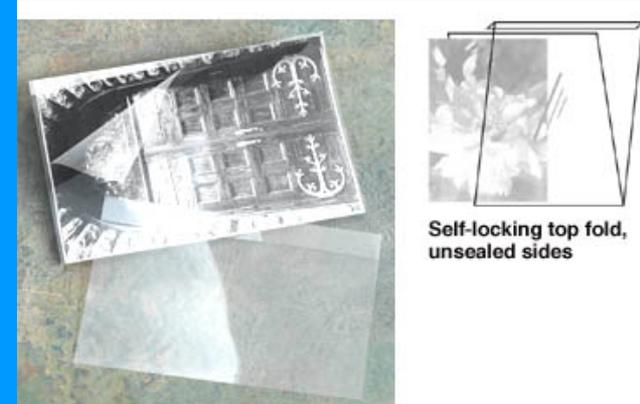
DO NOT USE glassine
or Kraft paper
envelopes.



Sleeves?

GOOD SLEEVES: Mylar,
polypropylene, polyethylene

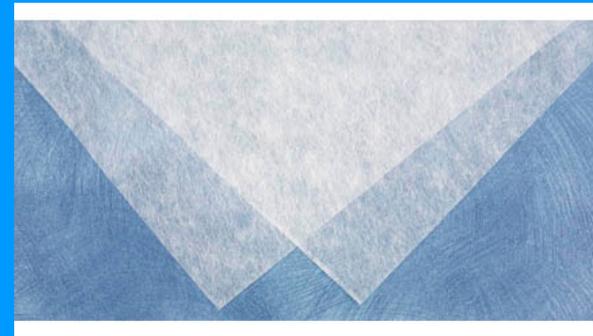
BAD SLEEVES: polyvinyl
chloride (PVC)



Caring for photos already in scrapbooks or albums



General rule of thumb:
Don't take them apart!



Interleave with
acid-free tissue
paper

Storage & Care for Specific Photo Formats

EARLY PHOTOGRAPHIC PROCESSES

- Store cased photographs flat in a small oversize box or upright in acid-free envelopes inside a “pamphlet” box.
- Do not remove photographs from cases.
- Loose tintypes: store in acid-free envelopes.
- Mark outside of box as “Glass” or “Fragile”.



Storage & Care for Specific Photo Formats

ROLLED PHOTOGRAPHS

Store “as is” in acid-free poster tube or box.



SLIDES

Do not store in slide carousel.
Store in acid-free slide boxes or PVC-free sleeves.

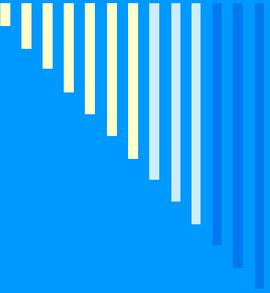
Storage & Care for Specific Photo Formats

GLASS NEGATIVES, POSITIVES, & LANTERN SLIDES

Store each in acid-free envelope or 4-flap enclosure & put in appropriate-sized acid-free box.

Mark outside of box as “Glass”.





Storage & Care for Specific Photo Formats

NITRATE NEGATIVES

- Separate from other archival material.
- DO NOT make prints or scans from negatives.
- Best storage is cold storage, in separate acid-free envelopes and in acid-free boxes. Do not store multiple negatives in one envelope.

ACETATE “SAFETY” NEGATIVES

- Store each in acid-free paper envelope, store envelopes in acid-free boxes
- Consider making prints or scans to preserve image
- Do not store multiple negatives in one envelope

POLYESTER NEGATIVES

- Can be stored in 3-ring or loose polypropylene negative sleeves or acid-free envelopes
- Do not store multiple negatives in one sleeve or envelope



Sound Recordings

- ❑ Store ALL LPs (of all sizes), compact discs, DVDs, and cassette tapes upright, standing on edge. Do not lay any recording flat.
- ❑ IDEAL storage conditions for magnetic tape (lifespan of 100-125 yrs): 46-50F, humidity 20-30%.
- ❑ Medium-term storage (lifespan of 40-50 yrs): 65-70F, humidity 45-50%. Minimal exposure to light.
- ❑ LPs: Remove from paper sleeves and jackets (keep but store separately). Store LPs in polyethylene sleeves.
- ❑ Cassette tapes: Store in water-repellant plastic containers.

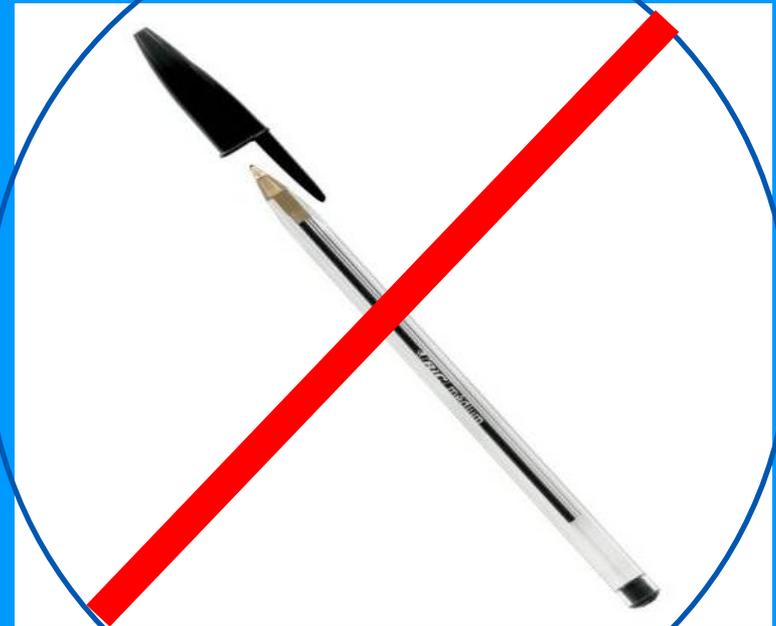


Moving Image Film

- ❑ IDEAL storage conditions for film & magnetic tape (lifespan of 100-125 yrs): 46-50F, humidity 20-30%.
- ❑ Medium-term storage (lifespan of 40-50 yrs): 65-70F, humidity 45-50%. Minimal exposure to light.
- ❑ Cold storage conditions: Must seal cans with archival tape; store in freezer bags; seal bag with tape; double-bag it and seal again. When removing for use, let sit at least an hour to acclimatize before opening bags.
- ❑ Moving image reels:
 - Store 16mm and 35mm on archival plastic cores (remove metal core).
 - Store 8mm as is.
 - Put film reels in clean archival plastic, archivally-treated metal cans, or new archival cardboard boxes.
 - Do not seal the enclosures UNLESS they are going into cold storage.

For more information, see: <http://www.filmforever.org/>

Handling Archival Materials: Rules for Staff & Patrons



Use only pencils
(I prefer 4B pencils for writing on
backs of photos)

Handling Archival Materials: Rules for Staff & Patrons



Use book cradles for bound volumes,
including scrapbooks.

Handling Archival Materials: Rules for Staff & Patrons



Limit patron handling of original copies of fragile, damaged, and/or valuable documents. Consider making a duplicate copy for patron use by photocopying, scanning, or microfilming.



Should staff & patrons wear cotton gloves when handling archival material?

- YES when working with photographs or moving image film.
- NO when working with other materials, as the cotton can catch on paper and tear it.

Preservation vs. Conservation

Preservation stops degradation of materials from progressing.

Conservation reverses degradation and restores materials to “original” state.

Archivists are preservationists.

Conservation should only be done by trained professional conservators.



Can I Conserve Archival Materials Myself?

Short answer: NO!

Do not use de-acidifying sprays, tape, glue, or any other method to “repair” a photograph. Your goal is to preserve the photograph in its current state against further degradation.

Consult the American Institute of Conservation website at <http://www.conservation-us.org> to find a trained conservator who can repair your photograph or document.

The screenshot displays the AIC website's 'Find A Conservator' page. The header includes the AIC logo and navigation links such as 'Become a Member', 'Make a Donation', 'Contact Us', 'Your Cart', and 'Log In'. A search bar is located in the top right. The main content area is titled 'RESOURCE CENTER' and features a section for 'Find A Conservator'. This section explains that the tool provides a systematic method for identifying and locating professional conservation services. It includes a 'MEMBER LOGIN' section with email and password fields, and a 'FAST FACTS' section stating that 150 million artifacts are in urgent need of treatment. The 'Find A Conservator' section is divided into 'Step 1: Select the Type of Conservation' and 'How should I choose a conservator?'. Below this, there are several categories with 'View More Info | Start Search >>' links: Architecture, Book & Paper, Electronic Media, Paintings, and Photographic Materials. The right sidebar contains sections for 'FIND A CONSERVATOR', 'ANNUAL MEETING', 'CALENDAR', 'ONLINE STORE', and 'Optium'.



National Archival Suppliers

Gaylord

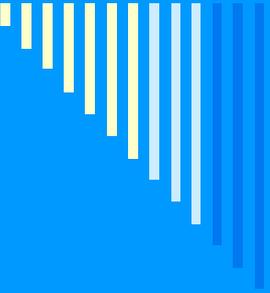
<http://www.gaylord.com>

Hollinger Metal Edge

<http://www.hollingermetaledge.com>

University Products

<http://www.universityproducts.com>



Further Reading

Mary Lynn Ritzenthaler. *Preserving Archives and Manuscripts (2nd ed.)*. Society of American Archivists, 2010.

Mary Lynn Ritzenthaler & Diane Vogt-O' Connor. *Photographs: Archival Care and Management*. Society of American Archivists, 2006.

Northeast Document Conservation Center (NEDCC) preservation leaflets & other resources: www.nedcc.org/resources/



Whom to contact for more information:



archives@uaa.alaska.edu
Archives & Special Collections
Consortium Library
University of Alaska Anchorage