

THE PRESERVATION OF YOUR FAMILY ARCHIVES

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HOME AND OTHER DANGEROUS PLACES FOR YOUR ARCHIVE

HOW ARE ITEMS DAMAGED?

1. **Previous questionable repairs**
 - Tape, Glue, etc.
2. **Poor handling practices**
 - Pulling books by their headcaps
 - Drops and spills
 - General Carelessness
3. **Early 20th century production methods**
 - Became more mechanized
 - Cheaper, faster, more efficient production = structural failure, more brittle
4. **Inappropriate Storage**
 - Attic,
 - Basement
 - Garage, Barn or Shed
 - Along outside walls
 - Near heat sources
 - Near or below water sources
 - On the floor
 - In direct light
 - In your vehicle

HEAP AND OTHER WAYS YOU PROBABLY SHOULDN'T STORE YOUR ARCHIVE

If Vertical:

- Not too tightly nor too loosely shelved

If Horizontal:

- Low stack to keep weight off the bottom items

In General:

- Unfolded, if possible
- Use archival protective enclosures
- Keep different mediums, processes, and material content separate

Albums

- Avoid albums with self-stick pages, a.k.a. “magnetic pages, because of the adhesive
- Do not use rubber cement or synthetic glue; rather, use archival photo corners made of paper or plastic
- Do not use pressure-sensitive tape or film
- Purchase archival grade materials
- Store in envelopes made of polypropylene
- When mounting, be sure that the materials that will come into direct contact with the facing page will not be damaged

HEAT AND OTHER ENVIRONMENTAL FACTORS THAT WILL TORMENT YOUR ARCHIVE

Environmental Factors to Consider

Ideal Environment: Cool, Stable, Dry

Ideal Temperature: 70 degrees Fahrenheit

Ideal Relative Humidity (rH): Between 45-55%

Warning signs:

LOW HUMIDITY:

- Dry nose, skin, and throat and cracked fingertips
- Shrinking wood floors
- Lots of static electricity
- More likely in older homes / less energy-efficient homes

HIGH HUMIDITY:

- Stained walls and ceilings
- Peeling paint and wallpaper
- Mold, mildew, and rot on walls and surfaces
- Insect infestation
- More likely in “tight” houses / highly energy-efficient homes

Use a Hygrometer to measure temperature and relative humidity (rH)

Example: acuRite Indoor Humidity Monitor, \$10 at Amazon, Home Depot, Lowes, Walmart, etc.

Solutions

LOW HUMIDITY:

- Use a humidifier (change filters regularly!)
- Keep a pot of water on top of a wood stove
- Add a water feature, such as a small water fountain

HIGH HUMIDITY:

- Add a dehumidifier (change filters regularly!)
- Installing exhaust fans in areas of high humidity
- Silica Gel Desiccants

HARD TO BELIEVE THERE ARE SO MANY DIFFERENT MATERIALS & MEDIA IN YOUR COLLECTION!

EPHEMERA YOU MIGHT FIND IN YOUR FAMILY ARCHIVE

- Letters & other paper
- Newspapers
- Books & Pamphlets
- Scrapbooks & Albums
- Photographic Processes
- Movies & Magnetic Tape
- Coins, Pins, and other metal
- Plant Matter & Organic Material

HEMP AND OTHER FIBERS USED TO MAKE PAPER

A Very, VERY Brief History of Paper:

- **Before the mid-19th century:** western paper was made from cotton and linen clothing rags, which was strong and durable (longer fibers)
- **In the mid-19th century:** wood replaced rags, which was much less expensive but was much less durable (shorter fibers). Mechanical pulping processes did not remove the lignin from the wood, making the paper acidic and prone to becoming brittle and discolored (e.g. newspapers).
- **In the 1980s:** alkaline buffers were added to paper manufacturing, to slow down acid hydrolysis.
- **1990s:** Most U.S. books are published to conform to ANSI/NISO paper permanence standards, or chemically purified wood pulp alkaline paper.

PAPER: PROPER CARE AND HANDLING

- Store flat as much as possible
- Handle with clean hands and work surface
- Use pencil to make any necessary marks and write on a hard surface to avoid embossing the paper with too much pressure
- Do not use paper clips, staples, rubber bands, tape or glue, and do not “dog ear” pages
- Store in a cool, dry stable environment
- Avoid exposure to direct light and heat
- Use supportive protective enclosures (archival folders, sleeves, boxes, etc.)
- Store paper unfolded and flat, or on rolled storage with a supportive core for oversized paper
- Separate different kinds of papers and mediums to avoid color/acid migration
- Do not use polyester sleeves on materials that have a powdery medium (pastels, charcoal, pencil, flaking paint). An electrostatic charge may be produced and can “lift” the medium from the paper.
 - Gaylord Bros. Interleaving paper
 - Gaylord Brothers Archival Folders
 - Gaylord Bros. DocuDry barrier board deep lid archival newspaper box

HOLY BIBLES AND OTHER BOOKS THAT MIGHT BE FALLING APART

BOOKS: PROPER CARE AND HANDLING

- Store in a cool, dry stable environment
- Avoid exposure to direct light and heat
- Dust regularly
- Do not fully open the covers to 180 degrees; support the covers to reduce the open angle and to avoid “cracking the spine”
- Do not “dog ear” pages or use Post-It notes
- Shelf books of similar size together
- Remove from shelf by grabbing the “waist,” not the headcap
- Store oversize books horizontally
 - Archival Envelopes
 - Mylar Polyester Film
 - Kyle Wrapper

PHOTOGRAPHS: PROPER CARE AND HANDLING

Keeping the environment cool and dry is the single most important factor in preserving photographic prints

- Always have clean hands, or even better, wear 100% cotton gloves
- Do not mark the photographs in any way
- Don't use staples, paperclips, rubber bands, tape or glue to organize or label prints
- Keep the room dry (rH at 30-40%) and cool (room temperature or below) in a clean, stable environment
- Keep the light exposure to a minimum
- Store the photographs in protective enclosures inside of an archival box

Cotton Gloves

Film and Print Sleeves

Photo boxes

FILM: PROPER CARE AND HANDLING

- Store in a cool, dry, stable environment
- Wear nitrile gloves, as cotton gloves will scratch the surface of the film
- Minimize exposure to dust and light
- Only handle film by the edge
- Maintain playback equipment and keep film wound securely (not too loose and not too tight)
- Store in an area that is as cool as possible, but allow to reach room temperature before playing
- Store in polypropylene containers
- Isolate from other collection materials and keep well-ventilated
- NOTE: Nitrate film is highly flammable (can self-ignite around 100 degrees)

Film can

HAIR AND OTHER FASCINATING MEMORABILIA YOU MIGHT HAVE COLLECTED OVER THE YEARS

MISCELLANY: PROPER CARE AND HANDLING

- Wear 100% cotton gloves
- Keep different materials separate using interleaving material and/or different storage boxes
- Don't use staples, paperclips, rubber bands, tape or glue
- Keep the room dry (rH at 30-40%) and cool (room temperature or below) in a clean, stable environment
- Keep the light exposure to a minimum
- Do not mount to a scrapbook

HALT! AND OTHER THINGS TO DO BEFORE REMOVING ITEMS FROM THEIR ORIGINAL HOUSING

Before removing an item...

- Why do you want to remove the item?
- Are you going to do more damage by removing the item?
- If you separate the original materials, will you lose historical and monetary value?
- Do you know what you're doing?

HELP! AND OTHER THING TO YELL; ACTIONS TO TAKE WHEN WATER, MOLD, OR BUGS ARRIVE

Water can come from:

- **Leaks** (Plumbing, Windows)
- **Drops** (Snow, Puddle, Toilet)
- **Carelessness** (Drink Spills, Falls)

ACTIONS TO TAKE:

1. Fan the book to allow moisture to escape
2. Insert folded paper towels
 - Be sure not to stress the binding
 - Change regularly (every 15-30 minutes)
3. Get the air moving by turning on a fan, but make sure it's blowing **INDIRECTLY** (be sure there's no active mold)

Vacuum Freeze Drying Vendors

Munters Moisture Control Service

P.O.Box 640

79 Monroe Street

Amesbury, MA 01913

800-422-6379/800-686-8377

Document Reprocessors

5611 Water St.

Middlesex, NY 14507

585-554-4500 / 888-437-9464

American Freeze Dry

39 Lindsey Ave.

Runnemede, NJ 08078

800-817-1007 / 856-546-0777

Emergency number 609-458-0510

First and Foremost: Mold is a Hazard to your health!

Why does mold bloom?

- Environment is too moist and humid
- Air is not circulating
- Mold loves the dark
- Mold and mildew lives on organic materials (leather, wood, paper, cloth)
- Becomes active and sends out spores, travelling throughout your environment

Mold doesn't die; it just sleeps & waits for an opportune moment.

Do you really need to keep the item?

Steps to take

- Active mold will smudge and smear. Dormant mold will brush off.
- Protective clothing, gloves and a face mask should be worn while handling moldy materials
- Do not attempt to clean moldy materials your home or office, as the mold spores will be released into the air
- Place items in a sealed bag and bring outdoors into the sunshine
- Once the mold is dry, use a HEPA vacuum or small brush outdoors
- Wash hands with warm soap and water
- Take action to prevent further mold growth (a dry environment with circulating air)

HINT OF MILDEW, AND OTHER ODIFEROUS UNPLEASANTRIES

Steps to take:

1. Get the air moving: by turning on a fan, but make sure it's blowing **INDIRECTLY** (be sure there's no active mold)
2. Fan the book to allow moisture to escape
3. Deodorizing Micro-chamber
 - Use Silica gel packets or cat litter with activated charcoal or zeolites
 - Place in chamber for up to 3 days

PSCOCID (a.k.a. Booklice)

- Feasts on mold & mildew
- Attracted to environments with high humidity (basements, AC units, etc.)
- Will *die* if humidity is removed
- Will re-infest if humidity returns
- Use a dehumidifier and/or a fan to circulate the air

SILVERFISH

- Love dark, damp areas
- Attracted to paper & wet clothing
- Feasts on carbohydrates, like sugars & starches; cellulose, glue in books, linen, silk & dead insects
- Pepper-like feces
- Nocturnal & secretive
- Will be *controlled* if humidity is removed
- Will reproduce/grow more quickly if humidity returns
- Use a dehumidifier and/or a fan to circulate the air
- Practice stringent housekeeping, caulk baseboards, open vents
- Repelled by cinnamon (does not kill)
- Exterminate professionally as necessary

CLOTHES MOTHS

- Inspect for larvae and eggs (generally red)
- Look for the source of the problem (one particular hat, for example)
- Remove and bag EVERYTHING in the infested area
- Wash down the area with vinegar and/or antibacterial products
- Wash or dry clean EVERYTHING
- Install pheromone traps / moth tents
- Keep humidity below 75% and lower the temperature
- Keep fabric clean
- Practice stringent housekeeping
- Vacuum often
- Do not store in closets with exterior walls, garages or basements with concrete floors, and warm attics.

HOUSE MOUSE

- Will eat anything
- A single mother can have ~ 48 babies per year, and reproduction begins 6 weeks after birth! Yikes!
- Usually droppings are the first evidence
- Practice stringent housekeeping & keep food sealed
- Fill holes and cracks to outside
- Place traps near infested areas

AMERICAN COCKROACH:

- Prefer dark, warm, humid areas
- Enter homes to find water & food
- Gain entry through cracks to outside
- Leave behind a musty smell
- Droppings look like the house mouse, but...
- Practice stringent housekeeping & keep food sealed
- Fill holes and cracks to outside
- They spread disease and are filthy, so call professional exterminators

HEAD AND OTHER THINGS YOU SHOULD USE WHEN CONSIDERING PRESERVATION TECHNIQUES

Write down everything you learn! Don't keep your family history in your head.

- Audio recording
- Video recording
- Take photographs
- Pen to paper
- Online

Head vs. heart:

e.g. Mold: Your heart may want to keep the material, but your head knows it may damage the rest of your collection

What's the purpose? Make an informed decision

- Purely informational?
- No value to the collection as a whole?
- Of any historical value?
- Of an personal value?
- How about insurance value?

e.g. Photographs: Your heart may want to hang it on the wall that faces that southern window that lets so much light in, but your head knows that it will make the photograph fade into oblivion

e.g. Cataloging: Your heart wants to put all of the beauties that you've collected into that scrapbook, but your head knows that you will damage several of the items in the long term

Bad!

- Elmer's Glue & other white adhesives
- Pressure Sensitive Tape
- Hot Glue Guns
- Rubber Cement
- Staples
- Paperclips
- Rubberbands
- Albums with self-stick pages

Always have a back up!

- Carbonite / Cloud Storage
- Photocopy or Digital Scan
- On a (gold) CD
- External Hard Drive
- Offsite Location

HOAX AND OTHER TACTICS THAT TRICK AND TEASE THE EYE

Fakes and Facsimiles: Reprints, Photocopies, Machine Prints, Scans

What to look for:

- Bumpy? Flip it over and let your fingers do the talking.
- Smooth? Dotted? Pull out the magnifying glass.
- Loss of sharpness? Check for ink bleed.
- How about the paper? Let there be light.
- Matching stains, tears or worm holes.
- Plate marks or indentations
- Old folds and appropriate discoloration
- Provenance?

HIRE A CONSERVATOR; OTHER PEOPLE YOU SHOULD CALL BEFORE PULLING THE SCOTCH TAPE OUT OF THE DRAWER

American Institute for Conservation of Historic and Artistic Works

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

Northeast Document Conservation Center – Free Preservation Pamphlets

<https://www.nedcc.org/free-resources/preservation-leaflets/overview>

The Phelps Library

Local History Collection

- Numerous print and online resources

Leah Hamilton

- pcmldirector@gmail.com
- 315.548.3120

S.T.E.A.M. Lab makerspace

- Mat Cutter
- 35mm to Digital Slide Convertor
- Scanner
- Cutting Mats & Bone Folders
- Board Shear
- Mylar
- Space to work & construct enclosures

HAVE YOUR CREDIT CARD READY, AND OTHER WAYS TO SPEND (OR SAVE!) SOME MONEY

Sources for Archival Materials and Tools

- Conservation Resources: <http://www.conservationresources.com/>
- TALAS: <http://www.talasonline.com/>
- Gaylord Bros.: <http://www.gaylord.com/>
- University Products: <http://www.universityproducts.com/>
- Hollinger Metal Edge: <http://www.hollingermetaledge.com/>
- Light Impressions: <http://www.lightimpressionsdirect.com/>
- Staples: www.staples.com
- Archival Products: www.archival.com
- Archival Methods: <http://www.archivalmethods.com/>
- The Phelps Library: www.phelpslibrary.org or 315.548.3120