4H•HLTH•406

Preserving Books, Paper Documents & Photographs

Preserving the Past and Present for Future Generations

Have you read "Collectbles" 4H•HLTH•402? If you haven't, take a step back and read it because the information below builds upon the content of "Collectibles."

Facts about printed materials:

- Papyrus – vegetable fiber (wood, cotton, linen)
- Parchment or vellum – animal skin
- Rag Paper – term used to refer to paper made from recycled cotton or linen pre-1850. Process still used today for fine stationery.
- Wood pulp paper – process began in 1850.
- Bookbinding – early bindings consisted of wood boards covered in tanned skin or fabric with an adhesive.
- Glossy magazines – pages are clay coated

Letters, legal documents, newspaper clippings, books, magazines, catalogues, manuals, comic books, scrapbooks and photographs are all subject to chemical and physical deterioration due to the materials from which they are made. By nature these products are fragile. Williams and Jagger (2005) say to think of paper as "dried vegetables." Just like vegetables, paper will rot when it is not kept in a dark, dry, cool location, free from insects and rodents.

Sagraves (1995) refers to "chemical" deterioration as the chemical properties of an object reacting to heat or light. "Chemical deterioration often leads to physical deterioration, but physical deterioration is not dependent upon chemical deterioration," according to Sagraves. Physical deterioration is the result of careless handling, storage, insects and vermin.

From the Industrial Revolution (1860) until 1950 the chemicals alum and rosin were used in making paper from wood pulp. When these chemicals are exposed to air and high temperatures sulfuric acid is produced. Thus letters, papers and books manufactured during this period are literally disintegrating from the weakened state caused by chemical deterioration. At a financially high cost, conservators are literally trying to save thousands of items written and printed during this time in history.

Preservation Practices:

When working with paper collectibles be sure the work area is clean – free of dirt, chemicals, food and drink. Consider whether the work environment is appropriate for preservation - temperature, light, air, humidity and insects. Avoid wearing jewelry or clothing which could snag or rip the item being preserved.

Before starting any cleaning process have as much information about the collectible as possible and start in an inconspicuous (out of sight) spot to see if there will be any harmful effect.

Don't ever tape, glue, rubber cement, staple, paper-clip, write on or laminate paper products being preserved. If you have a document which is deserving of preservation as well as being showcased, make a copy for display using high quality paper, similar in color and texture to the original.

Preservation Supply Kit:

- White cotton gloves
- Vacuum with brush attachment and low suction setting
- Shaving brush or brush similar in nature
- Archival L fold polyester sleeve or encapsulation envelope, acid-free paper/folder, archival-grade storage box
- Pest traps
- Photographer's compressed air can

Williams and Jaggar (2005) describe a three-tiered preservation system for printed materials.

Quick 'n' Dirty Method – Acid-free or polyester book covers, dry closet or drawer and pest trap

The Middle Road - Archival L fold polyester sleeve or encapsulation envelope, acid-free paper/folder, polyethylene zippered bags, dry closet or drawer and pest trap.

Pharaoh's Tomb – Basically a climate controlled vault.

Begin by washing your hands. Wear cotton gloves to reduce oil, acids and salts left by our skin.

Books - using a brush, gently brush away from the binding into the nozzle of a vacuum. Jacket the book with an acid-free or polyester book cover or place in archival book box and store on a well ventilated shelf, free of insects and vermin. Pest traps can be placed in the same general space but never directly on or especially near the book. Keep the shelves clean and check often for signs of insects or vermin.

Old scrapbooks and photo albums can be a challenge. Scrapbooks are filled with a variety of keepsakes attached in various manners. Old scrapbook style photo albums and self-adhesive plastic page protectors (magnetic photo albums) damage pictures because of the chemicals and adhesive residue.

Sagraves (1995) suggests placing acid-free paper or polyester film between pages of the old scrapbook style photo albums to reduce acid migration between pages, but it will not stop the vapor action of acid from affecting the scrapbook. If you choose to interleave (place pages between pages) a book or album do it with caution. Too many additional pages will damage the spine from the additional pressure. Nothing can be done to remove adhesives resulting form the magnetic photo pages.

If you truly want to preserve the content of old scrapbooks and photo albums Williams and Jaggar encourage the replacement of current albums with good quality acid-free pages and covers.

Paper Document *(Letters, Newspaper Clippings, Manuals/Magazines/Comic books and Legal Documents)* – Surface cleaning – remove surface dirt and pencil marks, paper clips or staples. Flatten any folded pages or dog-eared corners. The *Quick 'n' Dirty Method* referred to by Williams and Jaggar is to neatly stack documents tightly, one on top of the other. They say stacking reduces the oxygen surrounding the paper and slows down deterioration and makes them more fire resistant. Tightly packed paper burns very slowly. Store the items in a pest-free, dark, cool and dry box, drawer or closet. Do not tie with string or rubber bands because this will damage the edges of the paper.

For *The Middle Road* method of conservation encapsulate (method for sealing documents) collectibles in an L fold polyester sleeve or envelope. Or, you may choose to place more fragile items such as newspaper clippings in an acid-free fold.

For more extensive preservation methods learn about testing for acid and deacidifying paper.

Photographs – Photographs should be handled with great care because of their sensitivity to the environment – temperature, scratches, fading, curling, stain, mold and insects. Using clean cotton gloves, handle only the edges of photos, film and negatives. Never touch the face of the image. Dust should gently blown from the surface using compressed air.

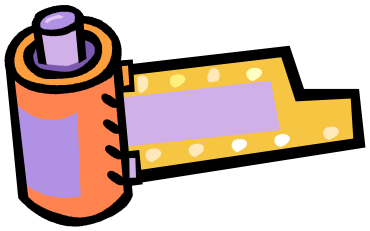
Sagraves advises not to write on the front or back of pictures, but if necessary use a pen specifically made for writing on photography or Williams and Jagger suggest a graphite pencil.

A more acceptable practice is to document the photo on the outside of the archival photo envelope in which it is being stored or on a separate piece of acid-free paper stored with the picture.

Early photos 1839 - 1871 (daguerreotypes, ambrotypes and ferrotype more commonly referred to as tintypes) should be maintained in their original case/sleeve and stored in an acid-free enclosure. Self-developing instant prints should be stored separately from all other photographs because of the chemicals contained within the plastic casing. Prints pre-1970 have a "gelatin" coating sensitive to moisture.

Store photographs in acid-free paper envelopes or plastic pockets/sleeves of nonpolyvinyl chloride -

polyethylene, polypropylene, triacetate, Tyvek™ or uncoated polyester (Mylar™). The clear plastics provide viewing from both sides while acid-free paper provides more stability. When using paper, mount the pictures with acid-free mounting corners.



Store negatives, slides, prints and transparencies in envelopes, sleeves, folders, albums or boxes designed specifically for the storage of photographic materials. Early negatives (cellulose nitrate) can be very flammable, so safety should be of upmost concern. Williams and Jaggar (2005) suggest that the only safe way to store this film is in a sealed container in a frost-free freezer. If that is not possible have them duplicated and dispose of the originals. Later generations of film include cellulose acetate (safety film of the 1930's) and polyester film introduced in the 1960's. If you do not know the age of the negative, find a film professional to help you identify its chemical composition.

Inkjets and Color Laser Prints – If you want a picture to last color laser is the only option. Inkjet prints fade and colors shift within months.

To learn more check out other related Centennial project materials.

References:

Williams, D. and Jaggar, L. Saving Stuff – How to Care for and Preserve Your Collectibles, Heirlooms, and other Prized Possessions. Simon & Schuster, 2005. ISBN 0-7432-6416-9

Levenstein, M. K. and Biddle, C. F. Caring for Your Cherished Possessions – the Experts' Guide to Cleaning, Preserving and Protecting Your China, Furniture, Clothing, Paintings and More. Crown Publishers, Inc. 1989. ISBN 0-517-57087-4

Sagraves, B. A Preservation Guide – Saving the Past & the Present for the Future. Ancestry Incorporated, 1995. ISBN0-916489-59—0

Check it out - Smithsonian Kids Collecting - http://www.smithsonianeducation.org/students/ideaLabs/amazing_collections.html

Related 4-H Project Areas: Health, Recreation, Arts and Hobbies, any project area of interest can become a hobby for collectables.

Other Related Centennial Fair Exhibit Project Materials:

4H•HLTH•402 Collectables
4H•HLTH•403 Preserving Vintage Clothing and Textile Products – Part 1
4H•HLTH•404 Preserving Vintage Clothing and Textile Products – Part 2
4H•HLTH•405 Storage and Display of Heirloom Textiles in the Home
4H•HLTH•406 Preserving Photographs, Books and Paper Documents
4H•HLTH•407 Preserving Metal, Wood and Plastic Collectibles (not available)
4H•HLTH•408 Preserving Memorabilia
4H•HLTH•409 History Mysteries Part 1– Recording and retelling the history of 4-H and its people through stories
4H•HLTH•410 History Mysteries Part 2– Writing the Story – your treasures - from Clues
4H•HLTH•411 Documenting and Cataloging Collectibles (not available)
4H•HLTH•412 Displaying Collections and Collectibles (not available)
4H•PDL•111 Personal Development – Documenting our Heritage
4H•HLTH•413 Authentication Card