

Clan Strachan Scottish Heritage Society, Inc.

Document Preservation & Conservation

The following pages contain two articles that pertain to document preservation and conservation. We hope you find these useful.

Interested in Repair?

If your documents are in need of repair, we suggest you search the Internet for at least three *Document Archival Repair & Conservation* firms.

There is a website called the ConservationRegister.com, where one can search for document conservators in the United Kingdom.

<http://conservationregister.com>

For those in the United States, there is another helpful website that provides a directory of document conservators. The website is called the Regional Alliance for Preservation:

<http://www.rap-arcc.org/index.php?page=services>

Need Archival Supplies?

There are a plethora of companies who provide archival supplies. Simply go to any Internet search engine and type in "*Archival Supplies.*"

Hints for Preserving Family Collections

by Northeast Document Conservation Center (NEDCC)

Libraries and historical organizations are often asked for advice on preservation by patrons and members. To meet this need, Northeast Document Conservation Center has developed a list of helpful hints for preserving family documents and memorabilia:

1. The best protection for your books, papers, photographs, and prints is a cool, dry, stable environment, e.g., moderate temperature and relative humidity with relatively little fluctuation, clean air and good air circulation, no natural or fluorescent light, and good housekeeping.
2. Don't store your valuable paper collections in attics or basements, which are commonly subject to excessive heat/and/or moisture problems. Also avoid storing collections beneath or in close proximity to water sources like washing machines, bathrooms, or air-conditioning equipment. Be sure to consider what is in the room above your collections.
3. Heat causes damage. Don't hang valuable photos, documents, or artworks over radiators, heating ducts, heat-producing appliances, or fireplaces. Books and boxed documents or photographs with long-term value should also be shelved away from heat sources.
4. Light causes fading and other damage. Keep photos and art (prints, watercolors, and other works on paper) in the dark as much as possible. Don't put valuable books and papers in direct sun or bright light of any kind. Hallways or other rooms without windows are best. Install shades and put up heavy curtains where you can't avoid windows.
5. Indoor pollution rapidly damages paper and is a growing problem in energy-conscious spaces with good insulation. Any valuable photo or artwork on display should be protected by a preservation-quality mat and frame. The glass or plastic covering of the frame protects the item from pollutants and dirt.
6. A musty smell is sometimes noted in books that have been moldy or mildewed in the past. To remove the musty smell from old books, first make sure they are dry. Place the books in a cool, dry space for a couple of hours. If damp, open the books, stand them up, and fan the pages to allow drying. A fan will help circulate the air. If the smell remains, one option to remove it is paper containing Zeolite molecular traps. Known as MicroChamber® products, these papers have proven very effective in removing odors. We suggest placing a sheet of the lightweight, 100 percent cotton interleaving tissue between the front board and the endpaper, every 100 pages throughout the volume, and again between the back board and endpaper. Close the book and set it aside until the odor has been reduced. You may need to replace interleaving several times, putting new sheets at different locations in the book.

Storage Enclosures

1. Storage enclosures must be durable and provide physical support. The following characteristics apply to enclosure design. (a) Enclosures should be stiff enough to protect their contents from tears, breaks, slumping, or other distortion. (b) Boxes should be fully closed (without gaps or handle holes), with snug lids to exclude abrasives and other pollutants. (c) The size and shape of envelopes, boxes, folders, or other enclosures should closely match the object or objects they hold. (d) Book boxes should be custom-made to the dimensions of each book.
2. Storage enclosures must also protect against chemical deterioration. Unfortunately there are not scientific standards defining the term *archival-quality* enclosures, and this term in catalogs can be misleading. When purchasing enclosures, look for specific terms that indicate the stability of the enclosure. Boxes, mats, folders, and other paper enclosures for preservation use at home should be *low-lignin* or *lignin-free*, and *buffered* throughout. Avoid lignin because it is a component of paper that leads to the formation of acid. The term *buffered* refers to the process of adding a buffer (such as calcium carbonate) during manufacturing to neutralize acids as they form over time in the storage materials.
3. Be aware that paper enclosures labeled *acid-free* most likely do not have a buffer added, and they may not be lignin-free or low-lignin. These enclosures may become acidic relatively quickly. While buffered paper enclosures are generally preferred to acid-free, some drawings and paintings on paper, blueprints, and some photographs may be damaged by the chemicals used as buffers. These should be stored in *neutral* (unbuffered), low-lignin enclosures if paper enclosures are used.
4. The terms *acid-free*, *buffered*, and *lignin-free* do not apply to plastic enclosures. Instead, look for enclosures made from specific types of plastic. Preservation-grade polyester, known by brand names such as Melinex 516, is the most stable. Polyethylene and polypropylene can be used if they contain no plasticizers. Acetates can change dimension, so they are not recommended. Plastic enclosures made from polyvinyl chloride (PVC) should never be used for preservation storage."
5. When considering paper or plastic enclosures for photos, select enclosures that pass the Photographic Activity Test (PAT). This test ensures that the enclosure will not react chemically with photographs. Supplier catalogs should indicate whether a photographic storage product has passed the PAT.

Specific Media

1. Letters, clippings, and other documents should be stored unfolded, because folding and unfolding breaks paper along the fold lines. Storing documents in folders rather than envelopes is recommended, because envelopes can cause damage as items are removed and replaced.

2. To preserve wedding pictures (or photos of any event) as long as possible, be sure the photographer takes a roll of black-and-white film. Although improvements in technology have extended the life of color prints and negatives, color materials still do not last as long as traditional black and white photographs and negatives.
3. If you produce color photographic prints at home from an inkjet printer, these prints are not considered preservation quality, and no standards govern their longevity. To maximize the quality and durability of this type of color print, it is best to use the inks and photographic paper recommended by the printer manufacturer, rather than third-party inks or papers.
4. When storing photos in an album, use "photo" or mounting corners (available from preservation suppliers), not "magnetic" pages (which actually contain adhesive that can stick to or react with your pictures). Choose a photo album with buffered or neutral, good-quality paper and/or polyester, polypropylene, or polyethylene pages — not vinyl or PVC.
5. Make multiple backups of all digital photographs and other valuable media. Videotape, magnetic disks (hard drives and floppy disks), CDs, and DVDs all have a limited life expectancy and are subject to both gradual deterioration and catastrophic failure.
6. If you want to preserve a newspaper clipping for the long-term, photocopy it onto paper that meets the American National Standard for Permanence of Paper for Publications and Documents in Libraries and Archives, ANSI/NISO Z39.48-1992 (rev. 1997). See the North American Permanent Papers website, <http://palimpsest.stanford.edu/byorg/abbey/napp/>, for a list of permanent papers.
7. To remove staples or old paper clips from documents (especially if they're rusty), slide a piece of stiff plastic (e.g., polyester, polypropylene) under the fastener on both sides of the document. Slide the paper clip off the plastic, or bend the edges of the staples up and pry it out with a pair of tweezers or a thin knife. The plastic protects the paper from abrasion and from damage by your tools. Do not use a staple remover, because it is likely to tear the paper.

Compare catalogs to find the supplies you want for the best price. Read product descriptions; if you have questions about the composition of a product, ask the supplier for details. If you can't get that information, find another supplier. There are now many excellent sources for storage enclosure and other preservation supplies. Many will sell to individuals and in small quantities. See NEDCC's online [Suppliers List](#) for up-to-date contact information for suppliers. See also NEDCC's preservation leaflets "[Storage Enclosures for Books and Artifacts on Paper](#)" and "[Storage Enclosures for Photographic Materials](#)" for additional information on choosing enclosures.

Document and Photo Preservation FAQ

by Linda L. Beyea

The preservation and conservation of family documents and photographs is a topic that interests many who research genealogy. Not only do those sources often provide valuable research information, but most of us have documents and photos that we know we should take proper care of, but we are not sure how.

In an effort to answer, "How do I?", I have compiled a list of some of the most frequently asked questions regarding preservation. A few of the questions and answers concern simple conservation procedures. Often when one has an item in need of treatment, the advice offered is take it to a conservator. However, in all honesty, the majority of the time the item is not worth the expense nor the effort of professional treatment, and there are some simple techniques that you can try at home.

PLEASE BE ADVISED that any treatments you perform on an item, you do at your own risk. DO NOT attempt to treat or repair a valuable or very fragile item; in that case, do seek the services of a professional conservator.

1. I have several old letters and certificates that I want to preserve. What can I do?

The key to preserving your paper documents is to keep them in an acid-free, humidity-controlled environment. Your paper documents need protection from a variety of elements which contribute to their deterioration--namely: light, heat, humidity, acids in papers, plastics, and adhesives, other objects, pollutants, and pests.

You can store and preserve your paper documents in a few different ways. You can organize and file your documents in acid-free folders, and keep them in an acid-free box. Or you could place your documents in archivally safe plastic sleeves and keep them in an album or binder. Another popular alternative is to encapsulate a document between two sheets of polyester film.

Regardless of how you choose to store your documents, NEVER STORE THEM IN AN ATTIC OR BASEMENT. Extreme temperature and humidity changes cause rapid deterioration. Store your items in a room that is comfortable to you, with stable temperature and humidity.

2. Can I store my documents in those plastic protector sheets that fit 3-ring binders?

Plastic enclosures are safe for documents ONLY if they are made of polyester, polypropylene, or polyethylene. Other plastics are not chemically stable and will release damaging acids over time. Especially dangerous is PVC (polyvinylchloride) commonly found in store-bought binders; it emits hydrochloric acid over time.

3. Is there any problem with putting more than one document in the same plastic sleeve?

No, but documents should be interleaved with acid-free paper to prevent acid migration from one document to another. Acid-free paper that is buffered will also counteract the formation of more acids in the future.

4. Is it okay to laminate a document?

Lamination is not considered a safe conservation technique because the process may potentially damage a document due to high heat and pressure during application. Moreover, the laminating materials themselves may be chemically unstable and contribute even more to the deterioration of the document. Lamination also violates a cardinal rule of conservation, and that is to only apply treatments that do not alter the item and which can be reversed.

5. I have some old newspapers that I would like to preserve. What's the best way to do it?

Since newspapers are made of highly acidic paper and deteriorate so quickly, you should always photocopy the information you want from them onto acid-free paper. You can then store the original paper in an acid-free box, or mount clippings in an archival scrapbook. Clippings could also be stored in acid-free file folders, interleaved with acid-free paper. If you want to frame the clipping, you should frame the acid-free copy rather than the original clipping.

6. What about the ink used in copiers and printers? Is there an archival ink that can be used as an alternative?

The inks used in photocopiers and printers are moderately durable. To date there is no alternative ink available for use in a copier or printer. It is a good rule of thumb to photocopy any document you wish to preserve onto acid-free paper. If you then keep the original and copy away from light, heat, humidity, etc. the document should last for several generations. Incidentally, there are archival inks for use on paper: Pigma ink comes in a pen, and Actinic ink comes bottled for use with a quill pen or in an ink pad.

7. I have an old wedding certificate that has been stored rolled up for many years. It is quite brittle. How can I safely unroll and flatten it?

Often when paper objects have been stored rolled for many years, they become quite brittle. In order to safely unroll your certificate, moisture needs to be restored to the document (known as humidification). Placing your

document in a humid environment for several hours should make it more flexible, allowing you to carefully unroll and flatten it. Watch out for ink on the document that might bleed (don't humidify it if the ink will run). You may have to experiment with the level of humidity and the amount of time you leave the document exposed; monitor to make sure it does not get saturated. Attempt to carefully unroll the document while it is still humid; do not proceed if it resists or begins to crack or tear. You could then flatten it by placing the document between two pieces of blotting paper, and then place a heavy object on top for a few days.

8. I have a suitcase full of old family photographs. Some of them are fading, and I would really like to preserve them. Any suggestions?

The same rules which apply for the safe storage of paper documents generally apply to photos. Again, there are a number of options for preserving your photos. If you prefer an album, archival albums have acid-free components such as scrapbook style pages, picture-pocket pages made of one of the safe plastics, etc. Store-bought albums with "magnetic" pages are typically highly acidic and dangerous to photos. Besides albums, there are acid-free boxes made to accommodate between 500 and 1000 prints. These boxes come with acid-free envelopes and sleeves for negatives. Finally, photographs can be encapsulated in polyester film just like paper documents.

9. What is the best way to store negatives? Should color negatives be stored the same as black and white?

There are a variety of storage options available. The best choice depends on the number of negatives and one's preference. Negatives can be stored in acid-free envelopes--paper or plastic--and placed in an acid-free box made for negatives and prints. There are also clear plastic sheets which hold various size negatives which can then be put in a binder.

The American National Standards Institute (ANSI) recommends non-buffered storage for color prints and negatives, and buffered storage materials for black and white prints and negatives. Nitrate film should be stored in buffered materials.

10. My grandmother's photo collection was glued on that old black paper that photo albums were made of. How can I get the photos out of the album?

The safest and recommended approach is to carefully try to lift the photos off of the album page with a tool called a microspatula or a small spatula. Slip the microspatula under the edge of the photo, and carefully move it back and forth. The ease with which the photos come up may vary depending on the humidity level. Dry conditions may make prints and backing brittle, easier to lift. Or humid conditions may soften the adhesive and ease removal. Experiment with it, but DO NOT force the photos so that they tear.

If you cannot lift them, cut away the black paper around the photo. If photos are on both sides of the page and you cannot cut around, interleave the pages of the album with acid-free paper and store the album in an acid-free box.