



# Conserve O Gram

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## Housing Archival Paper-Based Materials

Significant portions of most archival and manuscript collections are made of paper. This *Conserve O Gram* provides basic care guidelines for housing or rehousing paper-based materials. See *Conserve O Gram* 19/15, Storing Archival Paper-Based Materials, and *Conserve O Gram* 19/17, Handling Archival Documents and Manuscripts.

To Properly House Your Archival Collections You Must Do This...	Don't Do This...
<p><b><i>Learn What To Do Before You Begin</i></b></p> <ul style="list-style-type: none"> <li>• Read the <i>NPS Museum Handbook</i>, Part I, particularly Appendix J, Curatorial Care of Paper Objects, Appendix M, Curatorial Care of Cellulose Nitrate Negatives, and Appendix R, Curatorial Care of Photographic Collections; <i>NPS Museum Handbook</i>, Part II, Appendix D, Museum Archives and Manuscript Collections; and <i>Conserve O Grams</i> 13/1-13/4, 19/1-19/11, and 19/15 on archival materials before you begin work.</li> <li>• Take an archival preservation course.</li> <li>• Watch an archival preservation video, such as <i>Rescuing Records: Recognizing the Problems of Preserving Documents in Research Collections</i>, available from the Smithsonian Institution Conservation Analytical Laboratory.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't begin housing or rehousing archival materials until you have read or studied some background material.</li> </ul>
<p><b><i>Place Collections in Order Before Rehousing</i></b></p> <ul style="list-style-type: none"> <li>• Rehouse one collection at a time.</li> <li>• Keep all collections separate through careful labeling to minimize the risk of intermingling different collections.</li> <li>• Prioritize collections for preservation and reformatting based upon their value, use, and risk. See <i>Conserve O Gram</i> 19/10, Reformatting for Preservation and Access: Prioritizing Materials for Duplication.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't begin to rehouse collections until the containers of materials are placed in their original order as organized by their creator.</li> </ul>

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<p><b>Select Housing and Interleaving Materials</b></p> <ul style="list-style-type: none"> <li>• Use acid-free high alpha-cellulose folders, enclosures, and boxes that have no alum rosin sizing, lignin-containing groundwood, or volatile plasticizers.</li> <li>• Place everything in standard size folders within containers.</li> <li>• Use polyester enclosures or envelopes and polypropylene boxes for materials that receive high use as long as they are housed in a controlled humidity environment where little cycling takes place and the media are not loose or flaking.</li> <li>• House most paper records, except blueprints, cyanotypes, and color photographs, in buffered paper folders that have an alkaline reserve and 8.5 pH.</li> <li>• Select neutral pH housing for most photographs and blueprints; buffered housing for paper and for cellulose nitrate and cellulose acetate photographic negatives.</li> <li>• Place oversize materials in folders in mapcases.</li> <li>• Use very shallow horizontal boxes as long as little pressure is placed on the bottom items.</li> <li>• Place an item too small or fragile, such as friable media, for a standard container in a folder or mat in archival-quality board, then in a small document box or mapcase.</li> <li>• Select standard size archival-quality boxes, for example archival upright boxes, such as flip-top or records storage boxes.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't use acidic materials, which can damage documents, to house archival materials: <ul style="list-style-type: none"> <li>-standard office manila folders</li> <li>-kraft paper envelopes</li> <li>-corrugated cardboard boxes</li> <li>-any materials made out of ground wood pulp</li> </ul> </li> <li>• Don't laminate documents because the heat and solvents can permanently damage the documents.</li> <li>• Don't use glassine sleeves, including archival glassine, because they lose strength over time and are unstable.</li> <li>• Don't allow conservators or restorers to line fragile documents on fabric because fabric expands and contracts differently than paper.</li> <li>• Don't use polyester folders or enclosures if: <ul style="list-style-type: none"> <li>-the media is friable, such as charcoal, pencil, crayon, or pastel</li> <li>-the media is flaking, such as flaking emulsions or binders</li> </ul> </li> </ul>
<p><b>Select A Folder Size</b></p> <ul style="list-style-type: none"> <li>• Select a standard size folder that fits the full size of the container and is larger than the document being rehoused.</li> <li>• Use an acid-free separation sheet to indicate when a document too large for the box was removed to oversize storage.</li> <li>• Regard a folder as full when it has been folded at the bottom creases and sits flat without bulging.</li> <li>• Unfold any strong and durable documents.</li> <li>• Consult a conservator before unfolding an item that is tearing or flaking.</li> <li>• Maintain uniform folder sizes within a single box or mapcase drawer to ensure that materials do not get lost at the back or bottom of the container.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't overcrowd folders or fold or bend materials to fit the folder or box dimensions.</li> <li>• Don't use a lot of different size folders in a single box or mapcase drawer because documents can slip out and be exposed to damage.</li> </ul>

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<p><b><i>Decide When a Box is Full</i></b></p> <ul style="list-style-type: none"> <li>• Regard a box as too full <ul style="list-style-type: none"> <li>-if the box bulges</li> <li>-when an open hand placed between folders causes the box to bulge</li> </ul> </li> <li>• Divide the contents of a box that is too full into two different boxes with the same box number and the suffixes <i>a</i> and <i>b</i> respectively.</li> <li>• Regard a box as underfilled if the papers and folders slump, bend, or distort.</li> <li>• Use acid-free supports or wedges in a box that is too loose to hold folders upright.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't force materials into boxes too large or too small.</li> </ul>
<p><b><i>Label all Containers</i></b></p> <ul style="list-style-type: none"> <li>• Use a #2 graphite pencil to label all folders and boxes, and to mark documents when necessary.</li> <li>• Transfer all label information from the old folder and box to the new folder and box.</li> <li>• Label the folder with collection title, dates, accession and catalog numbers, box number, folder number, document types, subject matter, and the original folder heading.</li> <li>• Mark a document lightly, if it must be labeled, on the bottom right edge of its reverse side with a soft graphite pencil.</li> <li>• Label all containers with the collection name, accession/registration numbers, box number, folder and item numbers, and, if appropriate, the subjects, form, and processes.</li> <li>• Label all containers directly or use archival pressure-sensitive labels made of acid-free paper with stable acrylic adhesive.</li> <li>• Include location information in cataloging databases and finding aids. Consider preparing a shelf list that indicates the location of archival collections within the storage area.</li> <li>• Mark all containers that contain fragile, heavy, or oversize materials with those terms.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't use standard office adhesive labels on new boxes and folders because they eventually fall off and can transfer adhesive to records.</li> <li>• Don't affix adhesive labels to documents.</li> <li>• Don't use ball point or roller ball pens or magic markers to mark documents, folders, or boxes.</li> <li>• Don't store anything in an unlabeled container.</li> </ul>
<p><b><i>Organize Different Formats for Housing</i></b></p> <ul style="list-style-type: none"> <li>• Remove special format or size materials, such as audiotapes, photographs, videotapes, films, bound volumes, oversize or friable maps and drawings, electronic media, and high value or fragile items, from archival collections and replace them with an acid-free separation sheet indicating the new location.</li> <li>• House the items according to their special media requirements, such as placing valuable original photographs in cold storage after duplication.</li> <li>• Place copies that you want to keep with the collection by media and size in separate boxes at the end after the last collection box.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't house all items from a single collection together without regard to size, process, or format.</li> <li>• Don't trim documents to make them fit containers.</li> <li>• Don't dispose of fragments of documents.</li> </ul>

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<p><b><i>Protect Collections from Unstable Materials and Acid</i></b></p> <ul style="list-style-type: none"> <li>• Avoid damage by keeping paper away from rubber bands, wood frames, rubber cement, adhesive labels, corrugated board, newsprint, cardboard, pressure-sensitive tapes, gummed tapes, corrosive iron gall inks, and liquid chemicals.</li> <li>• Use an archivists' pen to test housing items with a low pH.</li> <li>• Remember that acidic materials also tend to be brittle and non-durable.</li> <li>• Place highly-acidic papers, as long as they don't support charcoal, pastel, crayon, pencil or other friable media, against a buffered backing sheet and place within an inert, uncoated polyester sleeve or L-weld sleeve.</li> <li>• Transfer any information from the back of the document to the back of the backing sheet.</li> <li>• Place objects with friable media in a sink mat or in acid-free paper four-flap sleeves.</li> <li>• Make xerographic or digital and computer output microfilm copies of highly acidic documents for reference.</li> </ul>	<ul style="list-style-type: none"> <li>• Don't house highly-acidic materials next to other unprotected papers.</li> <li>• Don't deacidify paper because it can result in damage to the media. The calcium carbonate reserve left by deacidification depletes over time, requiring reapplication. Deacidification doesn't substantially increase the folding strength of old paper or decrease brittleness, thus it doesn't solve the worst long-term problems of brittle/fragile documents. Leave deacidification to conservators.</li> <li>• Don't store color photographs, blueprints, cyanotypes or other alkaline-sensitive materials in buffered materials because this may cause color changes and image deterioration.</li> </ul>

## References

Canadian Conservation Institute, *CCI Notes 11/2* "Storing Works on Paper." Ottawa, Canada: CCI, 1995.

Van der Reyden, Dianne. "Paper Documents," *Storage of Natural History Collections: A Preventive Conservation Approach*. Pittsburgh, PA: Society for the Preservation of Natural History Collections, 1995.

Van der Reyden, Dianne, and Diane Vogt-O'Connor. *Rescuing Records: Recognizing the Problems of Preserving Documents in Research Collections* (Videotape). Washington, DC: Smithsonian Institution Conservation Analytical Laboratory, 1995.

## Sources

See *NPS Tools of the Trade* (available only to NPS staff) for housing and interleaving materials and a list of vendors. Archival-quality materials can be purchased from suppliers, such as the following:

Conservation Resources International, 8000-H Forbes Place, Springfield, VA 22151; (800) 634-6932 or (703) 321-7730; Fax (703) 321-0629.

The *Conserve O Gram* series is published as a reference on collections management and curatorial issues. Mention of a product, a manufacturer, or a supplier by name in this publication does not constitute an endorsement of that product or supplier by the National Park Service. Sources named are not all inclusive. It is suggested that readers also seek alternative product and vendor information in order to assess the full range of available supplies and equipment.

Gaylord Bros., Box 4901, Syracuse, NY 13221-4901; (800) 448-6160 or (315) 457-5070; Fax (800) 272-3412.

Light Impressions Corporation, 439 Monroe Avenue, P.O. Box 940, Rochester, NY 14603-0940; (800) 828-6216 or (716) 271-8960; Fax (716) 442-7318.

Metal Edge West, Inc., 2721 East 45th Street, Los Angeles, CA 90058; (800) 862-2228 or (213) 588-2228; Fax (213) 588-2150.

University Products, 517 Main Street, P.O. Box 101, Holyoke, MA 01041-0101; (800) 628-1912 or (413) 532-9431; Fax (800) 532-9281.

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