This kit is the result of a written request for sample materials from 35 ARL (Association of Research Libraries) members known to have active preservation programs. Twenty-three libraries responded, and of those, 16 contributed documents—some of which are included here. This kit contains: four preservation-related policy statements; 32 examples of staff training materials, for preservation orientation, general information, audiovisual programs, specific information, treatment procedures, library newsletters, and hands-on workshops; 14 examples of reader education, including handouts, newspapers and other publication articles, and signs; 6 examples of donor information; and 4 descriptions of exhibits. This kit was developed partially to supplement and update a Resource Notebook on Preservation that was published as part of the Preservation Planning Program. The institutions represented are Columbia University, Stanford University, New York Public Library, State University of New York at Albany, Yale University, University of Connecticut, Southern Illinois University, Brigham Young University, University of Michigan, University of Texas at Austin, Princeton University, University of Utah, University of Cincinnati, and University of Missouri at Columbia. (THC)
Preservation Education in ARL Libraries

Kit 113
A decade ago, formal preservation programs had been established by only a few of the largest ARL members. During the past five years, however, the library community has witnessed a slow but steady growth in the number of new educational activities. Where it has become a high priority to maintain collections in usable condition, it is essential that the people who work in, use, and provide financial support for the library are acting in harmony with that commitment. Although the formal literature does not provide a great deal of information that might guide an administrator's efforts to devise or evaluate a strategy for educating appropriate target groups, several libraries have developed materials for staff, readers, potential donors, and administrators of the parent organization.

This flyer/kit is the result of a written request for sample materials to 35 ARL members, selected because they were known to have active preservation programs. Twenty-three libraries responded, and of those, 16 contributed documents -- some of which are included in the kit. Additional materials are available from SPEC. Of those responding to a short questionnaire, 13 indicate they are developing teaching tools, while three note they have a preservation education program in place. Preservation administrators are typically involved in designing educational materials, sometimes alone and sometimes working with a preservation committee or conservator. In libraries where a preservation committee -- but not an administrative position -- has been established, the most likely result of committee work is a disaster plan. Three of the libraries that did not contribute documents note that a preservation administrator has recently hired.

EDUCATING STAFF Libraries have been most active in developing training materials for staff. The type and depth of the training needed varies, depending upon the level and nature of staff members' involvement in preservation activities. Several ARL libraries routinely schedule preservation orientation sessions, so that all staff members will be exposed to a discussion of preservation issues and related in-house services and activities, and will be provided with general guidelines and specific instructions for proper care and handling of library materials. Libraries have developed a variety of training tools for general library staff. They include printed instructions for care of books, film, and other media; bibliographies; glossaries; line drawings; and flow charts. Libraries also are making use of audiovisual programs, many of which have been produced locally. Library newsletters frequently convey preservation-related information that is of general interest to staff. Articles include announcements of local activities, reports on immediate or potential problems, and summaries of important regional and national issues.

Libraries are developing specific instructions for both general staff and for those who are directly involved in implementing a preservation program. Typical of the former are guidelines for responding to disasters and emergencies, for mounting exhibits, and for handling moldy and insect-ridden books. Detailed
manuals for preservation staff cover diverse procedures such as preparing materials for commercial library binding, conducting bibliographic searches for replacement copies of brittle books, and carrying out basic treatment procedures (e.g., pamphlet binding, and book and paper repair). Hands-on training often is provided for staff members involved in remedial treatments. Staff in the conservation unit are called upon to teach simple procedures to other staff members, and outside experts are sometimes brought in to provide instructions for local conservation staff who face the problems associated with working in a relatively new and rapidly developing field. The decision-making that precedes program implementation at any level usually is backed up by policy statements that provide a general framework within which collection development and preservation personnel can work.

EDUCATING READERS Among instructional aids already in use are handbooks that focus mainly on proper care and handling, bookmarks and brochures that carry preservation-related messages, special handling instructions printed on alkaline paper and tipped into deteriorating books, articles in campus newspapers, and plastic bags printed with preservation messages to be distributed on rainy days. Some libraries have produced short audiovisual programs for freshman orientation and for display in public spaces before library tours, on open house days, and during other special functions. Several libraries have mounted preservation exhibits, some accompanied by printed guides. The larger exhibits have been designed to increase people's awareness of preservation problems faced by libraries, the treatment options available, and what readers can do to prolong the life of collections. Posters and signs usually carry terse instructions for proper care of books and microforms. Instructions for correct handling of other media have not yet been well publicized. Projects in progress include development of additional handouts, signage, and other consciousness-raising materials; a preservation unit for freshman workbooks; several videotapes; a radio campaign; and a readers' guide to handling nonprint media.

EDUCATING POTENTIAL DONORS AND SENIOR ADMINISTRATORS The importance of educating donors and administrators for the purpose of garnering financial support for preservation has been addressed by a number of libraries. Articles that describe the preservation challenge and local attempts to meet it have appeared in university publications and newsletters to alumni and library friends groups. Programs developed for friends groups have included lectures, tours of conservation facilities, and hands-on instruction in simple treatment procedures. Direct appeals for support usually are made as part of a university-wide campaign.

MANAGEMENT RESPONSIBILITIES Clearly, the success of a broad-based program for preservation education is dependent on strong administrative support. Senior managers in libraries who are educated spokespersons can make preservation needs known to a wide audience. They can give impetus to local efforts by encouraging staff to attend orientation sessions; supporting ongoing education for preservation personnel; and identifying and providing resources and educational tools necessary to raise the level of preservation awareness and expertise among staff members and library users. ARL members that have conducted the Preservation Planning Program -- an NEH-sponsored program that helps a library develop a comprehensive approach to preservation problems -- have reported that one result of such a program is an intensified educational effort.

The SPEC Kit on Preservation Education in ARL Libraries (#113, April 1985, 110 pages) contains four preservation-related policy statements; 32 examples of staff training materials, including preservation orientation, general information, audiovisual programs, specific information, treatment procedures, library newsletters, and hands-on workshops; 14 examples of reader education, including handouts, newspaper and other publication articles, and signs; six examples of donor information; and four descriptions of exhibits. This kit was developed partially to supplement and update a Resource Notebook on Preservation published as a part of the Preservation Planning Program. The Resource Notebook and Manual from that program are available for $50 from the OMS. SPEC kits are available by subscription from: SPEC, Office of Management Studies, ARL, 1527 New Hampshire Ave., N.W., Washington, D.C. 20036. Individual kits are available for $20.00, prepaid. Outside the U.S. and Canada, add $5.00 per order for shipping. (ARL library members receive kits for $10.00).

This flyer/kit was prepared as part of the Collaborative Research/Writing Program by Jan Merrill-Oldham, Head, Preservation Department, University of Connecticut.
USES OF SPEC KITS

The Systems and Procedures Exchange Center (SPEC) is a clearinghouse operated by the Association of Research Libraries, Office of Management Studies that provides a central source of timely information and materials on the management and operations of large academic and research libraries. It facilitates the exchange of knowledge and documents through SPEC Kits, which are distributed ten times each year to ARL members and other interested libraries. The Kits include topically-arranged groupings of unedited primary source documents - selected for their value to administrators and decision-makers - that illustrate a wide range of alternative approaches to specific issues.

Kit documents come from general membership surveys and from selected libraries contacted directly by SPEC, and most Kits are produced within six months of surveys. The documents' value comes from their variety of ideas, methods, and solutions. They are not viewed as finished products, but rather as points of departure for a library's planning efforts and as stimulants to innovative approaches to problem-solving. As such, Kits do not present answers or prescriptions for any one library, instead they illustrate how selected ARL members are planning for or dealing with particular issues. The worth of any one Kit to a particular library will depend upon the specific topic covered and the library's stage of development in that area.

Materials are selected according to the following criteria:
- Presents an approach of potential value to administrators and decision-makers
- Timely, and dealing directly with the topic under consideration
- Probability of application of ideas or thinking to other library situations
- Illustrative of actual practice, rather than theoretical
- Understandable, readable communication

All together, the materials should provide a range of alternative approaches that complement each other, provide variety, and stimulate comparison and contrast.

Libraries can take advantage of the Kit compilations in a number of ways. Administrators can evaluate the assumptions, methods, and results of other libraries' approaches; compare and contrast them; and use the learnings in their own situations. Library staff members can use the kits as professional development and current awareness tools. Committees and task forces can use them to begin a review of current practices. And the Kits can identify other persons or places to contact for further information. Back-up files in the SPEC office also are available for loan to member libraries. In addition, SPEC will conduct on-demand surveys or analyses geared specifically for a single library.

EVALUATION

Kit Title/Number

1. Which uses did the library make of this Kit?

2. Please indicate how useful the Kit was for these purposes.
   - Very Useful
   - Quite Useful
   - Somewhat Useful
   - Not Useful

3. Do you have suggestions for this Kit or for future kits?

(optional)

NAME ________________________________

LIBRARY ________________________________

PHONE ________________________________

Please return this form to the SPEC Center, OMS/ARL 1527 New Hampshire Ave., N.W., Washington, DC 20036.
# PRESERVATION EDUCATION IN ARL LIBRARIES

#113, APRIL 1985

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This page contains the table of contents for the PRESERVATION EDUCATION IN ARL LIBRARIES issue #113, April 1985. The table lists various policies and staff training initiatives focused on preservation decision making and education in ARL libraries. Each entry includes the title, source, and page number for easy reference.
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PRESERVATION POLICY STATEMENT

1. Introduction

The Columbia University Libraries is committed to the preservation of its collections. Preservation is the action taken to prevent, stop, or retard deterioration of library materials, as well as to improve their condition or, as necessary, to change their format in order to preserve the intellectual content. Conservation implies the restoration of individual items to a state close to the original, by means of physical treatment. Preservation is used here as the broader term encompassing both preservation and conservation. Replacement of materials lost or missing in a form of preservation.

In a research library, most materials are selected for permanent value and therefore should be preserved. Some materials, however, may not be added as a permanent part of the collection, and a preservation decision may be made as they are acquired or a later selection decision may be necessary should the item become deteriorated, or the library's need changes.

In the Columbia University Libraries, responsibility and authority for preservation decisions rest with the following positions (or their designees): the Department Librarians, the Distinctive Collection Librarians, and the Science Division Chief. Each has established a Preservation Department within the Resources Group. The Head of the Preservation Department serves as an advisor to those responsible for collections, and the departmental staff provides various preservation services. The Department has produced the Preservation Handbook. The Head of the Department also chairs the Preservation Committee which has produced a Disaster Preparedness Plan. These two documents provide the technical details and procedures for day-to-day preservation activity; they also provide recommendations for action in special situations like floods.

The purpose of this policy statement is to provide the framework for coordinating preservation decisions with collection development decisions. It provides guidelines for coordinating such decisions within individual collecting policies. The guidelines apply generally to all formats but do not include Art Properties.

The policy statements in this document are written within the philosophical framework that preservation is necessary and needs no further justification in a research library. They are based on certain basic principles:

1. The department or distinctive collection librarians, including the Science Division and Butler Collection selection officers, are responsible for developing and maintaining a collection which meets the needs of their library users. Therefore, preservation policy for materials in those collections is best determined by those officers. They, however, consult area bibliographers, reference staff and others when necessary, and encourage input from other staff members, including personnel from the Acquisitions and Gifts and Exchange Departments.

2. Preservation decisions have economic as well as philosophical and aesthetic implications.

3. Within budget and staff constraints, high priority is assigned to preservation.

4. A written preservation statement provides a framework for decision making, and provides historical documentation for decisions. A written statement also provides a list of priorities for preservation treatment.

5. Indefinite storage of unusable materials within the Columbia University Libraries cannot be justified.

6. Those responsible for collections must understand the treatment options available for materials, and the guidelines for preservation decisions.

7. Preservation decisions should be recorded.

II. Preservation Decision Points

Preservation decisions for individual items must be made at various points in the life of an item in the library. Decisions for which such decisions are needed should be brought to the attention of section or department staff who are charged with making such decisions. The individuals most likely to be authorized and responsible for preservation decisions are indicated in the examples which follow. Other staff members in various units may appropriately be charged with certain levels of decision, e.g., replacement of lost or missing periodical issues or books under $50.00; or choice of bindery (commercial or CUL).

Methods of documenting the decision, such as recording on the shelf list card, entering it into the online record, coding it onto the piece itself, etc., should be utilized to minimize redundant handling. [Determining the most efficient method for recording these decisions is beyond the scope of this document, and a separate group should explore the possible options for this activity.]

The following routine activities present the most likely and
frequent opportunities for preservation decisions and related activities:

1. Selecting (BIBLIOGRAPHER): Examples of types of preservation decisions and activities: bind/do not bind; restore upon receipt (used books); catalog for restricted collection; do not catalog (office copies, ephemera, added copies for reserve, etc.). The bibliographer is also involved in resolution decisions of replacement, rebinding, withdrawal.

2. Ordering and Receiving (ACQUISITIONS LIBRARIAN): Examples of types of preservation decisions and activities: replacement of individual periodical issues; identification and return of defective copies.


4. Materials Processing (SUPERVISOR, PRESERVATION OFFICER): Examples of types of preservation decisions and activities: encapsulation; commercial or CUL repair; microfilming.

5. Circulation (SUPERVISOR): Examples of types of preservation decisions and activities: Identification of materials in disrepair and referral to selectors; recommendations for replacement of lost or missing materials.

6. Pulling for Interlibrary Loan (INTERLIBRARY LOAN STAFF): Examples of types of preservation decisions and activities: replacement of missing pages; identification of materials in disrepair and referral to selectors; recommendation of replacement of lost or missing materials.

In addition to these routine processes in which preservation decisions and activities may be required, systematic collection maintenance; review and disaster recovery are activities which require preservation action.

III. Treatment Options

The Preservation Department offers a number of options for the treatment of deteriorated materials, primarily based on the condition of the materials. The earlier the deteriorated material is identified and acted upon, the more economical the treatment process will be. The treatments which follow are ordered from the least expensive and routine to the most costly, complicated, and time-consuming. Processing is not included in the cost figures.

1. Commercial binding and rebinding. At a current cost averaging $1.15 per pamphlet volume, $5.75 per monograph rebinding, and $7.00 per serial volume, our two commercial binders will provide long-lasting protection for materials added to the collection in paper covers and serial volumes; and rebinding when the paper is still sound.

2. Preservation Department repair and rebinding. Materials that are in worse case than a commercial binder will give can be repaired and rebound in house. Because of the hand work and staffing costs, this is often more costly than outside binders' work.

3. Protective enclosures. Materials that cannot be rebound because of deteriorated paper can be placed in a protective case. This is advisable for the following categories of materials: those which have value as artifacts, those that are already preserved but require to be kept as long as possible, single volumes of serial sets, or those materials not important enough for more expensive preservation. Each case costs approximately $3.00. Single sheet items or pamphlets may be encapsulated in mylar and post-bound.

4. Replacement. Materials that are still in print or have been reprinted, or microfilmed by another source may be replaced through acquisition budgets. Costs are variable. Microfilm of another library's copy of an item may often be ordered from the holding library. If a CUL copy is too badly deteriorated to film, (see also section IV.D.)

5. Preservation Department microfilming. Deteriorated materials that have not been preserved by other libraries or commercial ventures may be microfilmed in house. Estimated costs are $50.00 per SO exposure monographic title. Serial titles incur one bibliographic cost, about $25.00 or half of the total, but have higher collation and filming costs.

6. Conservation treatment. Rare and valuable materials may be treated by a conservator. Costs are high. Each item must be considered in light of available treatments and funds. Decisions to engage outside conservators should be made in coordination with the Preservation Department.

IV. Collection Preservation Policy Guidelines

A. Introduction

Preservation decisions for individual items or groups of items are very difficult. The decisions are often subjective. The following considerations will both present the larger context for preservation decisions, and assist the librarian in making consistent, logical decisions. Because the materials are deteriorating so quickly and it is expensive both to keep materials in poor condition on the shelves or to treat the materials, it is imperative that a systematic process be initiated rapidly.

B. Decision-making considerations

1. Type of collection

a. Library of record: Many Columbia libraries hold such comprehensive collections in certain subject areas that they are considered libraries of record, e.g., SLS in library science and Avery in architecture. A library of record is defined as a...
library which agrees to acquire, maintain, and lend items from, its very intensive collections for the benefit of other libraries. For these subject collections, retaining one copy of each text in any format is of prime importance. Generally speaking, the basic text must be kept in perpetuity and be mended, rebound, and replaced if deteriorates or is lost. RLG primary collecting responsibility subject areas may also fit into this category.

b. Research level collections: There are collections that support research in certain areas, although the materials may not be unique or the collection designated as one of record. Individual decisions must be made for this material in relation to its value to the collection; other factors to consider are the scope of the collection, the content of the item, and its use patterns.

c. Instructional support collections: There are collections that are designed to support a specific department's educational programs. Current materials may be mended or rebound, but not necessarily replaced, or serials may be preserved, but monographs not.

d. Duplicate collection: Some collections contain no unique material, but material which is duplicated in another collection, e.g., College and Burgess-Carpenter. Material may be weeded more heavily, and withdrawn when deteriorated beyond rebinding, as long as the withdrawal decision is coordinated with the primary holding collection.

e. Rare Book and Manuscript collections: Volumes that are old, valuable, impossible to replace, and/or have value as artifacts, involve extraordinary conservation needs. Materials that fit into this category are listed in section IV.D.

2. Type of materials

a. Monographs. Monographs should be purchased in hard cover if possible. When paper covers are the only format available, they will be commercially bound before being added to the collection. Preservation decisions are made on an individual basis.

b. Serials. Serials should be commercially bound as early as is practicable for their security and preservation. Microform or paper replacement should be considered depending on use. Preservation decisions require a consideration of the entire holdings. Individual deteriorated volumes may be boxed in order to keep a set together.

c. Monographic series. Volumes in monographic series are treated as monographs if separately classified, as serials if classified together.

d. Nonprint materials. Each type of nonprint material has its unique preservation needs which must be considered. Preservation decisions must be made using the same criteria for print materials as well as considerations of unusual housing requirements, reading equipment, and fragility of the media.

3. Evidence of Use

Materials that have circulated or been requested on inter-library Loan are obvious candidates for preservation decisions. Although past use usually predicts future use, it is difficult to second guess scholarship needs, and materials should be preserved if the content warrants.

C. Guidelines for withdrawal of materials

Deteriorated materials may be withdrawn if they meet one of the following criteria:

1. No longer within the scope of the collection;
2. Duplicates or added copies;
3. When they have been replaced;
4. When they have been superseded, and the earlier edition is not necessary to the collection;
5. Ephemeral;
6. Easily available in microform;
7. Easily available through a cooperative program.

D. Guidelines for transfer to restricted access or special collections

Materials should be offered to the Rare Book and Manuscript Library in Butler, and special collections in Avery, Health Sciences, East Asian, the Science Division of Law depending on collection and subject matter for consideration if they meet one of the following criteria:

1. Early printed books:
   a. Printed in Europe before 1600;
   b. Printed in England before 1714;
   c. Printed in the United States before 1812;
   d. Health Sciences and Science monographs printed before 1876;
   e. Art and Architecture printed before 1800 or in the U.S. before 1895;
2. Important first, limited, or special editions;
3. Landmark editions of books in the history of a subject;
4. Fine bindings, typographic, or graphic illustration;
5. Important signed, annotated, or association copies;

Any questions as to whether a book is suitable for transfer should be directed to the librarian in charge of the appropriate special collection.

E. Guidelines for Replacement

1. Deteriorated volumes

Materials should be replaced when possible as they become deteriorated and still have value to the collection. If the

BEST COPY AVAILABLE

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material can be replaced in hard copy, either by a new edition, a reprint, or another copy in better condition, this is the replacement of choice. The second most desirable replacement is by available microform either from a commercial source or another library. Considerations of space in a library may result in a preference for microform. If neither option is available, a recommendation should be made for inhouse microfilming. Because there are so many titles that need preservation microfilming, inhouse filming time cannot be used to film items already available from a commercial source; no matter what the cost.

2. Missing Volumes
   Materials that have been declared missing should be replaced under the same conditions as deteriorated volumes.

3. Missing Pages
   Pages which have been removed either from a bound journal or a monograph can be replaced by ordering them from a commercial publisher, or photocopies from another library through interlibrary loan under certain conditions. Consideration should be given to the number of missing pages, the accessibility of the material, and the cost of an interlibrary loan transaction. If the number of pages is high or if the material from a monograph would be expensive if borrowed from another library, then consideration should be given to replacing the entire book or journal rather than just pages.

   Replacement pages for serials are ordered in most departments through Book Acquisitions. Certain guidelines should be followed in preparing the replacement pages for rebinding. The pages must be copied on acid-free paper and must be double-sided. Adequate margins must be present. These pages may be tipped into the volume if fewer than six pages; more will require rebinding of the volume. If the number of pages is significant, consideration should be given to binding the replacement pages separately if they represent a distinct unit such as a chapter, entire article or issue.

V. Sample policy statements
   Sample statements for the Business Library and the Butler Collection are appended. These statements are samples only and have not been officially approved.
VI. Recommendations

The Preservation Policy Committee makes the following recommendations:

1. That each Department, Division Chief and Distinctive Collection Librarian set annual goals for preservation activities and that those goals and accomplishments be reported to the Resources Group Director for the Annual Report.

2. That a survey of library backlogs be made to determine the extent of deterioration of materials in them and plans made for the preservation of materials before they are added to the collection.

3. That guidelines for transfer to the Rare Book and Manuscript Library and other special collections be reviewed and materials actively identified for transfer.

4. That consideration be given to the establishment of restrictive access policies and collections for items which are of great value, but continue to fall outside the scope of the special collections.

5. That budget lines for replacements be established for all acquisition budget units.

6. That a preservation budget be established for conservation treatment and housing supplies for each Departmental Library and Distinctive Collection.

7. That the library administration continue to seek funding for a storage facility to replace other storage areas with poor environmental conditions, to provide new storage, and to renovate existing library facilities which have poor environmental conditions, including relamping, temperature, humidity and filtration controls.

8. That each Department Librarian and Distinctive Collection Librarian, and the General Library Selection Officer prepare a written preservation policy statement. This statement should be prepared in consultation with bibliographers, other library units that collect in the same areas, subject specialists, and other appropriate persons.
Conservation Office

Stanford Libraries Brittle Books Program

A survey conducted at Stanford in June 1979 in the humanities and social science collections in the Green Library determined that 26.3% of the collection was so deteriorated as to require immediate attention.

In order to alleviate some of the problems caused by brittle paper, the Conservation Office has designed a Brittle Books Program to route and handle these materials. Once books have been identified as brittle, there are six alternatives available:

1. Discard, based upon value, significance, and holdings of other libraries
2. Replacement, either by new or used copy
3. Protective cover and copy retained
4. Photocopy, in house or purchased from another source
5. Microcopy, in house or purchased from another source
6. Restore
7. Phased deterioration

The final decision is made by individual members of the Collection Development Staff in conjunction with the Conservation Office. A search is conducted by Conservation in the Stanford University of California, Berkeley, in print, out of print, reprint, and microform catalogs to provide bibliographers with as much information as possible to choose the best option. After the choice is made, the Conservation Office follows through by ordering or routing materials as described in the Policy and Procedure Manual.

Until mass deacidification and/or the strengthening of brittle paper are possible, the alternatives available to libraries are less than ideal, and involve great costs in time, staff and budgets in order to preserve the intellectual content of vital research materials.

Brittle Books Program

Choosing the best alternative for brittle books is often difficult, sometimes because no alternative seems best. The Library of Congress recently published these criteria for general consideration when contemplating the choices available:

1. Physical Condition: How much time is left before the book is irretrievably lost?
2. Scarcity: How many copies exist - what condition are they in?
3. Significance: If this is the last copy on earth, and it will disintegrate tomorrow, is it worth saving?

In light of these criteria, and the searching which was done by Conservation before the bibliographer was asked to make the decision, choices can sometimes be more obvious.

DISCARD

Many times works can be discarded simply because their significance is no longer, or will never be, important. Other times discarding is best because Stanford holds other copies or other editions, or OCB does. Or the book may not be useful for research at Stanford, nor does it seem likely that it ever will be.

REPLACEMENT

Brittle material may be replaced by new editions, reprints or copies in better shape. Sometimes this is more cost effective than microfilming or photocopying, or necessary if portions of the original text have been lost or damaged.

PROTECTIVE COVER AND RETAIN

Occasionally material is deemed important enough to retain in its original state. If it is extremely fragile, it is wrapped in an acid-free portfolio or a book box and transferred to the locked stack for protection.

PHOTOCOPY

See attachment

MICROCOPY

See attachment

RESTORE

For material of great scarcity or value, restoration by a conservator may be chosen.

PHASED DETERIORATION

BEST COPY AVAILABLE
Preservation Photocopy

General Statement

The photocopying of materials has been common for many years. It has only been in the last eight to ten years, however, with the great improvements in technology of the photocopying process, that permanent copy could be expected. How the quality is such that the Xerox Research Facility states that the permanence of the Xerox process is affected only by the permanence and durability of the paper used. Thus a photocopying process can be employed, if suitable, as an alternative in replacing materials for preservation.

Standards

There are no national standards set for preservation photocopying. There are obvious guidelines for quality which can be established locally. A permanent/durable paper of a medium weight is essential. The paper must be acid-free with a buffer added to help prevent deterioration. The photocopier must be well maintained so it will operate optimally to produce good contrast and clear reproductions. Proper binding will help effect a copy more permanent than the original.

Definition

Preservation hard copy is a photocopy made to preserve the contents of material in immediate danger of being lost, usually to brittle paper. The photocopier is made from the original material or from the copy held by the Stanford Libraries. The hard copy is bound and returned to the stacks for use.

Guidelines

Selection for preservation hard copy is made at the Stanford Libraries by the bibliographers in conjunction with the Conservation Office. Material suspected of being brittle is checked out to CON as a location. If the material is in fact brittle, the title is rechecked in the Stanford catalogue to determine if Stanford holds other copies or editions. It is also searched in the various in print, out of print, reprint, and microfilm catalogues. All information is made available to the bibliographer to aid him/her decision. After searching, preservation hard copy is considered as one of the alternatives for replacing material.

There are some guidelines to help determine the suitability of material for preservation photocopy:

1. If a volume is part of a set, replacement with hard copy is appropriate.
2. If the item is a high-use one, hard copy is preferable.
3. Current reference material is appropriate for hard copy.
4. Items requiring reference to extensive notes or graphic materials are suitable for hard copy.
5. Any volume which includes plates or graphic material to be saved is appropriate for photocopying.

Routing

Once photocopying has been chosen as the most appropriate preservation technique, the volume is prepared by the Conservation staff. All missing pages are replaced by copy from another source, or are inserted stating that the page is missing. If the item is to be discarded, then it is discarded for copying, as a better copy will result. Whenever possible, double-sided copying will be done maintaining the original format and size. After copying, the new material will be checked carefully against the old for error. The new copy will be sent to Binding and Finishing to be bound. Conservation will be notified when the binding is done and the volume has been endprocessed. Then the original will be discarded or sent to Gift and Exchange except in unusual circumstances. Conservation will handle Cancel/Transfer procedures.

If there were no changes in size, format, or cataloguing, the copy returns to the shelves with no changes made on the catalog card. If changes were indicated, then the copy would be routed by Binding and Finishing according to the Policy and Procedure Manual.

All copyright restrictions are observed.
Preservation microfilming

General Statement

Preservation microfilming was first undertaken as an official project by the Library of Congress, New York Public Library, and Harvard. Libraries in the 1930's. Both 16mm and 35mm black and white, silver halide film were found acceptable for preserving under proper use and storage conditions. Silver film is preferred, as the resolution and reduction ratio of the image of all sizes of material is best, and is easier for users to read.

Standards

Clear standards have been set by the American National Standard Institute for the physical quality of the film, its filming and developing. In addition, the Library of Congress, the National Micrographics Association, and the American Library Association have set standards regarding collation, targeting, bibliographic information and storage.

Definition

Preservation microfilming is defined as that undertaken to preserve the contents of material in immediate danger of being lost, usually to brittle paper. The film is made from the original text, and is not a copy from another material. A preservation master must be stored in a limited access, controlled environment with restrictions placed upon the number of copies which can be made from the original. The Library of Congress limits the use of its masters to one. Most other research libraries place four uses as the upper limit. A single Register of Microform Masters may only be held by nonprofit organizations.

Guidelines

Selection for preservation microfilming is made at the Stanford Libraries by the bibliographers in conjunction with the Conservation Office. Items suspected of being brittle are checked out to CGI as a location. If the paper is brittle, the material is searched in the Stanford catalog as well as other sources to determine if Stanford holds other copies or editions. If the material is still available on the reprint, upon or out-of-print market, or whether it may be purchased in a microfilm somewhere else, purchase of microfilm indicates Cooperative microfilming supports an effort advocated by the Library of Congress, New York Public Library, NLC and ARK. After searching, microfilming is considered as one alternative for replacement of materials.

There are some guidelines to help determine the suitability of the particular volume for microfilming:

1. If the item is unique to Stanford, or if the contents are so important to the Stanford collection and replacement copy would be difficult or impossible to obtain, a preservation master is a safeguard against loss. From this master, copies can be made for use, and hard copy can be made on request, and requests from ILL can be handled.

2. If the item is a low-use one, but still important to the collection, microfilming is a good alternative.

3. If they are not high-use materials, serial run or deteriorating newspaper collections are suitable for microfilming. (In the case of newspapers, microfilming is the only copying alternative available at present.)

4. If items are deteriorated, little-used, and space is a problem, preservation microfilming is a good alternative.

5. If an item is quite scarce, microfilming is suitable as a contribution to national preservation and bibliographic recording.

Routing

Once microfilming has been chosen as the most appropriate preservation technique, the volume is prepared for the filming by the Conservation Staff. All pages are checked to insure completeness. If any are missing, they are obtained as a copy from another source and included as a substitute. If microfilming is not available, a note to that effect is included in the appropriate place.

The material is sent to the outside firm which makes all Stanford Library microfilms at the present. They follow ANSI standards as well as Library of Congress standards. The film is inspected for density, clarity, and errors before it is returned to Stanford. Films are stored in acid-free boxes and marked with appropriate bibliographic information if available. When the film is returned to the library, it is checked in by Conservation staff who then route it.

Preservation masters are sent first along with the use copy to Technical Services according to the following instructions in the Policy and Procedure Manual. The catalog department prepares bibliographic records for format changes and/or catalogs the uncataloged material. They submit the information to the RMIM. The preservation masters are then sent to Administrative Services who assign a control number, maintain an inventory file, and control storage and handle requests for copies or for a second generation master. The use copy of the microfilm is sent to the Current Periodicals and Serials Division. The original material is held by the Conservation Office until the microfilming has been completed. Then the original is discarded and sent to Gift and Exchange if possible. In some limited circumstances the original may be saved and sent to Area F in the Locked Stacks. Conservation handles bar code/transfer procedures.

All copyright restrictions are observed.
TECHNICAL MEMORANDUM No. 5

Preservation of the Collections

1.0 PURPOSE AND SCOPE

1.1 The purpose of this Memorandum is to provide specific guidance on policies, responsibilities, and procedures for the preservation of all collections.

1.2 The specifications given recognize preservation efforts adopted in recent times because of increasing deterioration and technological change.

2.0 POLICY

2.1 This Memorandum is to be considered as only interim in nature in view of the Library's plans and future cooperative activities in the area of preservation.

2.2 The Research Libraries shall consider and, whenever and wherever practicable, cooperate with collection preservation policies and practices recommended by national organizations or in force in other institutions.

2.3 All activities involving preservation of the collections shall be conducted in such a way as to not impede policies and procedures designed as a result of studies and surveys to be conducted independently in the future.

2.4 The Research Libraries shall have ultimate control over all policies involving preservation of the collections.

2.5 There shall be a Collections Preservation Coordinator, reporting to the Chief of Preparation Services, whose prime function shall be to integrate all current programs and to act as liaison between designated staff members involved in preservation problems.

2.6 The Committee on Preservation of The Research Libraries Advisory Council shall be responsible for recommending collections preservation policies and procedures.

2.7 Wherever possible, preservation procedures on specific items shall be instituted and completed before cataloguing by the Preparation Department.

2.8 All orders initiated within the Research Libraries for the production of microforms by the Photographic Service shall require both a negative microform for the Master Negative File and a positive microform or hard copy for public use. When an order for a microform of a complete work or complete run of a publication is received from an outside source, permission to copy shall not be given unless the organization or individual originating the order is willing to receive only a positive print of the microform and bears the cost of a master negative for the Research Libraries' collections if now existing or if the item is not suitable for production under the Revolving Fund.

2.9 There shall be no public use of at least one out of negative microforms produced for preservation purposes. The only exception shall be the previously produced "negatives for public use."

2.10 In recognition of the great value of reprint publishing as an aid to preservation, the Research Libraries shall cooperate generally with reprint publishers in lending of Research Libraries' materials for reprinting. Rarities and materials in excellent condition and on paper of lasting quality shall not ordinarily be lent for reprinting. Final decisions in this area shall remain with the division chiefs involved.

3.0 RESPONSIBILITIES AND PROCEDURES

3.1 Each Division shall designate a staff member who shall handle appropriate collections preservation matters for that Division. The responsibilities of such staff members shall be to:

a. Recommend material for rebinding, replacement, or reproduction.
b. Arrange to have volumes rebound, relined, or shrink-wrapped when needed.
c. Consult with subject specialists within the Library and the Collections Preservation Coordinator when necessary.
d. Forward materials with reproduction decisions to the Collections Preservation Coordinator.

3.2 Staff members shall refer to the divisional representative all material in need of immediate attention.

3.3 All material rejected by the bindery as too poor to bind or mutilated shall be referred to the Collections Preservation Coordinator, who will consult with the appropriate divisional representative to determine a proper course of action.

3.4 The duties of the Collections Preservation Coordinator are given in the attached Appendix I.
Duties of the Collections Preservation Coordinator:

a. Review all material designated for preservation and when advisable suggest alternative means of reproduction or possible replacement.

b. Cooperate with and advise all research libraries staff members concerned with the preservation program.

c. Accept from divisional representatives all material submitted for microreproduction.

d. Consult with the appropriate divisions when questions arise involving microform processing of material printed in characters of non-Roman alphabets.

e. Determine the scheduling and work flow of items for preservation from divisions to the Photographic Service in consultation with that Service after giving due consideration to factors such as available personnel and funds.

f. Maintain statistics of all material on hand awaiting filming and other reproduction in the Photographic Service and of material returned from the Photographic Service. (Statistics shall be forwarded to Chief, Preparation Services on a monthly basis.)

g. Have custody of filmed material awaiting cataloging.

h. Maintain liaison with reprint houses and have general responsibility for the lending of materials for reprinting. Division chiefs shall be consulted before lending agreement is made, and consulted again concerning the disposition of originals.

i. Maintain a Microcopy Information Center of data on developments in the area of microforms and on the availability of library materials in microform. Inquiries from other institutions with respect to developments in the Library shall also be referred to this Center.

j. Maintain a Reprint Information Center to provide information for the guidance of division chiefs wishing to acquire replacements in reprint form.

k. Maintain a file of information related to the preservation of the collections.

l. Apprise the Advisory Council’s Committee on Preservation of pertinent research and development with respect to preservation.

m. Serve ex-officio as a member of the Committee on Preservation, Research Libraries Advisory Council.
TO: Conservation Task Force  
FROM: Barbara Via  
DATE: May 18, 1981  
SUBJECT: Staff education and training - recommendations

The Task Force has concluded after much research and discussion that educating the staff in proper handling of library materials and conservation awareness is one of the primary facets of a conservation program for the University Libraries. Several aspects of a staff education program have been identified and are set out here:

I. Personnel.

If staff awareness of library preservation is to work and be an ongoing part of the Conservation program, there will need to be established a permanent committee or interest group in this area. Persons serving on this committee should have an interest in, and knowledge of, conservation issues. Logically, certain positions on the library staff lend themselves to membership on such a committee. It is recommended that the Special Collections Librarian and/or the Archivist, the Head of Non-Print Services, the Stack Maintenance Supervisor, and the Head of Physical Processing would be good candidates to serve on such a committee. This committee would report to the Assistant Director for Operational Planning and Support and would be responsible for implementing the staff awareness program, suggesting improvements, and assuring that the staff education program remains a viable effort.

II. Elements of the Program

a) Attitudes of the staff toward the libraries and their collections should be addressed. A staff which shows concern for the physical survival of the libraries' materials is likely to encourage the patrons to do likewise.

b) Basic structure of the books. Emphasis on their fragility. construction. See Attachment 1.

c) Proper shelving techniques including special handling of oversized materials. How to shelve books in the stacks, how to place books on trucks to minimize damage. How to remove a book from a tightly packed shelf, etc. See Attachment 2 and 3.

d) Photocopying techniques. How to position library materials for photocopy so as to minimize damage to spines.
e) Non-print materials. Their special needs. Ways in which staff unintentionally damage these materials.

III. Methodology

a) First step would be a crash program to alert all staff members that the library is embarking on a conservation program. A panel discussion could be held, a slide-tape program on preservation could be shown to all staff, a library exhibit could be set up, a staff bulletin could be initiated, or a combination of all these things.

b) Consideration should be given to developing an in-house slide-tape program dealing with the conservation problems and solutions in our libraries. Such a program would include proper materials handling. Several programs exist which have been developed by other research libraries such as Yale and New York University Law School. These programs should be previewed (and possibly purchased) for ideas. See attachment 4.

c) A mini slide tape program, geared towards our student help should be prepared. This program would not be as detailed as the one for the whole staff and would emphasize shelving techniques.

d) Staff Information bulletin. A bulletin designed to increase awareness of the library's conservation problems and the steps it is taking to solve those problems could be emphasized. The bulletin should have an up-beat style and suggest ways that staff could help the library's conservation efforts.

e) The staff education committee should contact the committee on programs and set up a program dealing with some aspect of conservation at least once per year.

f) An in-house manual should be prepared detailing the specific steps to be taken in handling various conservation issues. One person should have clear responsibility for maintaining the currency of this manual.

g) The staff training committee should work closely with the heads of the various units of the library to make certain that library workers are trained to be aware of conservation and proper handling techniques.

h) A library exhibit should be set up on the structure and proper handling of both books and non-print materials. This would be educational for both staff and patrons.

IV. People Resources

The following people are willing to give advice, and have experience with staff training in conservation/preservations.
INTRODUCTION TO PRESERVATION WORKSHOP

I. Introduction
   A. Purpose and organization of Preservation Department
      1. Interrelationship of 3 divisions
   B. Teaching function of Preservation Department
      1. Instruction in any phase of expertise and responsibility
      2. Consultation available to other depts., special collections, S&Ds, etc
      3. Other workshops given
      4. Central supply

II. Care and handling of books
   A. Physical structure of books
      1. Why important to understand
      2. Demonstration of stages of book construction
   B. Various ways a book is used and handled in YUL, what happens at each point of use, what stresses put on volume at each point
      1. Acquisitions
      2. Processing
      3. Shelving
      4. Browsing
      5. Charging out at circulation desk
      6. C & H by user after taken out
      7. Book return and book drops
      8. Reshelving
      9. Shipping
   C. Education of staff
      1. Demonstrations
         a. Various problems resulting from poor C & H habits
         b. Proper shelving techniques
         c. Formats might encounter in library, and how to handle each
      2. Slide show (to be shown)
   D. Education of users
      1. Slide show for freshmen (not shown)
      2. Example set by staff
      3. Handouts
      4. Instruction signs

III. Keeping abreast of new developments in Preservation field
   A. Routing list of preservation literature
   B. Short reading list available
   C. Regular, though infrequent, updates

IV. Questions and answers
Orientation Programs in Preservation at Yale

On an annual basis, we present a Preservation Orientation Program for all new staff (we had a drive several years back to reach all present staff, and Circulation staff in particular). This program consists of the Head of Preservation (or her designee) presenting a 10 minute introduction on the Preservation field in general and our efforts at Yale. The Head of the Conservation Division then speaks for 10 minutes on that Division, its work, and the general theory of Conservation. The Reference Librarian in charge of the Microtext Reading Room then gives a short presentation on handling microforms. Our 28-minute slide show on the Care and Handling of Library Materials is then presented, after which all attendees are taken on tours of the Preservation and Conservation divisions.

We also present an annual Commercial Binding workshop to those staff members throughout the system who are responsible for or involved in the preparation of materials for the Library Binder.

We have presented over 20 disaster workshops (in 1983) to every library unit.

We also have a brief (5+ minute) slide show for incoming students and have had modest success at showing it during the student orientation period for the last several years. The 1-page, folded handout included in this packet is also handed out at that time.
STAFF ORIENTATION

PRESEPARATION ORIENTATION FOR LIBRARY STAFF
- University of Connecticut -

Audience: All new full-time and part-time staff members.
Frequency: Two presentations (in the same week) each semester.
Length of presentation: Two hours.
Content:

I. Introduction.
A. Relationship of the preservation unit to system-wide organizational structure.
B. Function of the preservation unit; its internal organization.
C. Objectives of the orientation program.

II. The Care and Handling of Books, a slide/tape show produced at the Yale University Library. [Suggest to audience that they look for relevant information regarding care of both library and personal collections.]

III. Discussion and demonstration that highlights and emphasizes important points made in the slide/tape show.
A. Relationship of environmental factors (temperature, relative humidity, light) to longevity of library materials. Climate control within the University of Connecticut library system: problems and solutions.
B. Relationship of modern bookmaking technology to the need for proper care and handling of library materials.
   1. Paper: the decline in quality over four centuries. [Show pre-19th century imprint, brittle volumes published in 1860, 1880, 1900, 1920, 1940.]
   2. Case bindings: how they differ from earlier bindings, where and why they are weak, how this relates to shelving practices.
C. Recognition of materials that should be sent to Preservation. [Show difference between structural and cosmetic damage; what mold and mildew look like and how to handle infected materials when routing to Preservation.]
D. Handling techniques: shelving and removal from shelf [show book with ruined headcap, and how that happens]. Tying books with cotton string and securing microfilm with acid-free paper strips [show what elastic bands do to books and films]. Writing messages on flags rather than clipping them to book pages [show what metal and plastic paper clips do to paper]. Handling microfilm. Photocopying [show oversewn book with inadequate inner margin, and text block cracked in pieces--explain that some materials can't be successfully copied; demonstrate how a right-angle copier is used and note their locations in library buildings].

IV. Treatment options.
A. Need for remedial treatment. [Show kinds of damage that are most prevalent in the library system: wear and tear, mutilation, inappropriate repairs.]
B. In-house options. [Show examples of a variety of treatments--simple to complex.]
C. Commercial binding. [Show examples of the variety of styles available; describe the nature of the decisions that are made in-house, and the discriminating way in which binding services are used.]
D. New technology: the pending impact of increased use of alkaline paper (mention the upcoming ANSI Standard for Permanent Paper for Printed Library Materials), mass deacidification facilities, optical disk technologies.

V. Conclusion: the University Library's preservation program--how it will grow and change.
TO:  Karen Ashby, Administrative Services  
  Sandra Benjamin, Education/Psychology  
  Jerry Cassidy, Catalog  
  Darlene Cawthon, Serials  
  Jim Chervinson, LCS Project  
  Linda Davis, Circulation  
  Sue Dotan, U. S. Grant  
  Nancy Fligor, Undergraduate Library  
  Camille Hedden, Library Services  
  John Keffler, Library Services  
  Sharon Kowalsk, Order  
  Lily Lee, Science  
  Betsy Leenig, Interlibrary Loan  
  Catherine Martinsek, Social Studies  
  Sidney Melieves, Library Services  
  Carole Palmers, Humanities  
  Lillian Peterson, Special Collections  
  Regina Shelton, Undergraduate Reserves  

FROM: Darrell L. Jenkins, Director of Library Services  

SUBJECT: Conservation in Morris Library Video Tape

A fifteen-minute video tape—written and produced by the Conservation and Bindery Section of Serials Department (primarily Debby Willett)—has been completed and was shown at the October 11 meeting of the Administrative Council. The film is designed to serve as a teaching/instructional aid for student workers in Library Affairs.

The video tape will be shown in the near future to Student Worker Supervisors in Library Affairs, followed by a discussion of the use of the video tape. My thinking would be to have separate meetings for the student workers in each department or division and have each meeting conducted by the respective Student Worker Supervisor. The video tape can be shown and discussed as one part of each meeting. Student Worker Supervisors could certainly discuss other matters as well. Since the conservation of our materials is a very important matter and included in the Conservation Policy statement adopted by Library Affairs, attendance by student workers will be required. More than one meeting in each department/division may be needed. Also, the video tape will eventually be placed in the Self-Instruction Center for individual viewing.

You will receive more specifics shortly. If you have any questions, feel free to contact Carolyn Morrow, Debby Willett or me.

Thank you in advance for your involvement in this activity and your ongoing commitment to the maintenance and service of our valuable collections. Your contribution is of vital importance.

cc: Department/Division Heads  
  Library Affairs Fiscal Officers  
  Carolyn Morrow  
  Kenneth C. Peterson  
  Debby Willett

TO: Carole Palmers  
  Nancy Fligor  
  Karla Owens  
  Betsy Leenig  
  Regina Shelton  
  Catherine Martinsek  
  Kathy Cook  

FROM: Carolyn Morrow, Conservation Librarian

SUBJECT: Conservation videotape

Enclosed you will find a list (hopefully complete) of those students from your department/division who attended the viewing of the conservation videotape on November 9-11. There could be omissions—students were merely asked to sign up as they came in.

The videotape will be on reserve in the IRS Self Instruction Lab under the title "Conservation in Morris Library" for those students who did not attend one of the scheduled viewings.

Oh, 47 new people in all attended. And we're preparing/expecting to see more items up for repair as a result.
OUTLINE FOR TALKS TO LIBRARY STAFF

Preservation and conservation

Public health vs. medicine

Librarians and archivists have to play the role of the public health officer

There is room for everyone

You have to know something about the problem and solutions

Problem

Poor materials, air pollution & central heating, more use

Democratic society results in greatly increased use, access and display

Technology results in greater range of materials to care for

Greater literacy means that books & records are cheap & common; result, contempt

We have the old disasters (fire, flood, war) plus new ones (pipes, constructn)

Solutions

Many things to do to extend the life of the materials, more or less by value

Encourage the use of permanent materials

Slow down the rate of deterioration by controlling temperature & humidity, removing pollutants from the air, storing material in safe containers (permanent, stable materials).

Slow down the rate of physical deterioration by repairing early, protecting vulnerable material in boxes and restricting access, improving shelving and handling practices among users and staff; for very valuable materials, full conservation is called for; for circulating materials, library binding.

Reduce the damage caused by outside agents: insects, humidity & mold, insects

Reduce the likelihood of damage from disasters, and salvage promptly and systematically.

When necessary, replace the book with a microcopy or a photocopy.
Handle books with clean hands. Fingertips are often indelible.

Handle microfilm by the edges, as you would a photograph. Smudges and scratches obliterate images, destroying information. Phonograph records should also be handled by the edges. Fingertips can cause chemical changes in plastics, altering the surface of disks and the sound they produce.

Don't attach metal paper clips to book pages for any reason. They crimp and tear paper, and leave rust stains. Plastic clips are less damaging but should be used with discretion.

Processing instructions should not be written on library materials (or parts of library materials, e.g., errata sheets). Those markings are a defacement and should be jotted on scrap paper instead—flaps are less likely to get lost than small slips.

Avoid using elastic bands to hold together damaged books or piles of material. Bands can dent covers and cause paper to tear and crumble. As they deteriorate, they give off damaging sulfur compounds. Use cotton string instead.

Make sure that books in your work area and in the stacks are shelved upright. Leaning causes bookbindings to break down quickly.

Books too tall to shelf upright should be shelved spine down—not on their fore edges. Fore edge shelving is extremely wearing on bookbindings because it stresses their weakest part—the hinge.

A non-damaging way to remove a book from the shelf is by placing an index finger firmly on the head of the text block and tipping it out. Yanking at the top of the binding eventually ruins the spine covering—cloth and paper tear, leather breaks.

Don't turn down the corners of pages to mark your place. The creases will be permanent, and if the paper is brittle the corner will break away with one fold. Laying a book face down weakens the binding and can Neil paper. The best way to mark your place is with a clip of paper and with a pencil or other bulky object which distorts the binding.

When photocopying books, take care not to wrinkle or crumple pages. It a book is bound so that it resists being pressed flat, don't force it settle for a less than perfect image of the page you're copying.

Don't eat or drink while reading library materials, or in an area where crumbs and spills might damage them. Food attracts paper-eating insects, and spills cause permanent stains.

Be alert for signs of mold and mildew. When you discover moldy material, put it in a plastic bag, immediately wash your hands, and bring the problem to the attention of the Preservation Officer.

Bring damaged materials to the attention of the Circulation Department, where they will be charged out to "Conservation" and sent to the conservation work area. Minor repair problems can become major ones if they are neglected too long. And do leave this work for the conservation staff. Rubbery cement, white glue, and pressure-sensitive tapes have poor aging properties and damage paper and bindings. They should not be used on research materials.

And finally—don't read while swimming.

Preservation Office
October 1982
**CARE AND HANDLING OF LIBRARY MATERIALS**

- Remove a book from its shelf by pulling at the top of the spine. A better way is to push the volumes on either side of the one you need in the middle of its spine.
- When shelving, be sure that books are properly supported so that they stand upright. Allowing books to slump on shelves can weaken their hinges and cause them to become distorted. Forcing books onto tightly packed shelves can easily cause damage. Take the time to adjust bookends or shift materials as needed.
- Avoid shelving books on their fore-edges. The force of gravity eventually can loosen a book at its hinges. Heavy texts can be pulled right out of their covers.
- Bookends can be very destructive. Avoid those with sharp edges. They can knife into books, wrinkle or cut paper, and tear cover materials. Those with flanged edges are preferred. They should be at least one inch taller than the height of most books on the shelf. Without such support, taller books will tend to lean over and can become warped. Rusty bookends can stain and damage book covers; replace or repaint them wherever possible.
- Volumes too tall for normal shelving should be laid flat if the shelves are wide enough to support them. If the shelves are too narrow, separate folio shelving should be provided. No more than three or four oversize volumes should be stacked on top of one another. If folio cases or flat shelving are not available options, shelf large books spine down and use acid-free streamers to indicate their call numbers.

Do not push books up against the back wall of the shelf. This can cause their fore-edges to be abraded and lack of air circulation can encourage mildew in humid weather.

- Over-loaded bookshelves invite disaster. Never pile books on top of a full truck. Make sure that any books in transit are secure; if a truck is not full, use sturdy bookends to prevent the books from falling off. All but oversize volumes should be placed upright on booktruck shelves. Pile books if flat and care should be taken to avoid hanging the edges and corners of large volumes against elevator doors and aisle shelving.

**REPAIRS**

- Books with torn spines, broken sewing, loose pages, or weak hinges should be referred to the Book Repair Unit. Tape should never be used to repair torn spines.
- Minor page repairs on books that have little physical value should be done only with special document repair tape. It can be ordered from the Distribution and Supply Unit.
- For attaching bookplates, pockets, or date due slips, use only adhesives recommended by the Conservation Unit.

**PROCESSING**

- Avoid using metal paper clips and rubber bands on books. The sharp metal edges can tear and crimp paper and leave rusty stains. Rubber bands can emit sulfur compounds which cause paper to deteriorate; they can be especially damaging to paper that is already brittle. Plastic paper clips and cotton string ties are available from the Distribution and Supply Unit.
- Open new books carefully; forcing the covers back can break a book's spine especially if the volume is tightly bound.
- Minimize the number of items inserted in new books during processing. Thick packets of catalog cards and order forms can weaken the binding.
- Avoid leaving stacks of books piled on desks, tables, and floors. In crowded work areas, they are easily tipped over.

**ENVIRONMENT**

- Try to avoid shelving books in areas exposed to direct sunlight. UV rays can accelerate the chemical deterioration of paper and fade cloth covers. Where possible, keep shades and curtains closed and turn lights out in little used areas.
- Do not shelf library materials near or on radiators. Avoid housing them in close proximity to light fixtures or fire sprinklers.
- Good housekeeping is important. Dust and dirt can stain books and hasten chemical deterioration. Spillage from food and drink disfigures materials and can encourage insect and rodent infestations that are often difficult to eradicate.
- Protect the collection from rain and snow; keep a supply of plastic tote bags on hand for use at circulation desks during bad weather. Bags are available from the Circulation Department, 104 Hatcher.

*Photography is one of the primary causes of damage to library materials. Because of the great stress photography places on bindings, books should be copied only when absolutely necessary. They should be positioned on the machine so that only one page at a time is on the exposure surface. Avoid pressing down on the spine. Books with narrow page margins or brittle paper should be referred to Library. Photoduplication Service, Room 2 Hatcher.*
Microforms

Microforms have their own specific requirements for proper handling and storage. Safeguards against mishandling will prevent unnecessary wear and tear. Microforms are easily scratched and torn if not handled correctly. Because of the heavy use of microform service copies in libraries, the more rigorous archival standards established for the storage of master negatives are impractical. However, since repair and replacement of any library materials are both costly and time consuming, all efforts at proper care and handling will help to extend the useful life of microforms. Supplies mentioned below are available from the Cul Supply Room or the Reprography Laboratory.

Handling

Clean, well-maintained reading equipment can prevent damage to film. Dust and dirt on glass flats scratch and abrade the emulsion obliterating the image. Clean equipment regularly and keep lens housing covered when not in use.

Handle microfilm only by the edges or by the leader; and fiche by the header. Fingertips leave oils and acids on the surface which blur the image and attract dust and dirt.

When working with a large quantity of microfilm or fiche, use white cotton gloves to avoid fingerprints or scratching.

Tears that are spotted should be repaired before the film goes to the shelf. Further damage can occur when torn film is used on a reader. Torn film can be repaired by the Reprography Laboratory staff using splicing equipment. Pressure sensitive tape should never be used to repair tears. Film with extensive damage (where text is lost) may need to be replaced.

Roll film should have adequate leader and trailer for easier handling. Users will be able to load reading equipment more easily preventing damage from fingerprints. Leader and trailer can be spliced to film by the Reprography staff.

Storage

Microfilm should be stored on plastic reels, in closed boxes. Metal reels with sharp edges should be replaced with plastic; damaged or worn boxes should be replaced to keep out dust and dirt that can scratch film.

Remove all rubberbands on microfilm reels. Sulfur in rubberbands causes chemical reactions that damage film; and even sulfur-free ones can damage.

Full reels of microfilm will stay neatly wound by themselves; shorter titles that tend to unwind should be secured with paper wrap-arounds.

Rewind microfilm reels firmly but not too tightly. Too tight can cause buckling or a scratch in the film can stick together when temperature and humidity are high.

Microfiche are best stored in individual paper envelopes. This provides protection from dust, dirt, and abrasion. Filing without envelopes is not harmful if temperature and humidity are kept low to prevent them sticking together.

Inspection

All microforms being added to the collection should be visually inspected for completeness, overall appearance, and readability. Some of the problems to watch out for are:

- blurry image
- deep scratching
- too light or too dark
- anything that causes the image to be illegible
- missing or out of order pages, issues, etc.

The Reprography staff is available to help confirm these problems.

Microforms with problems of image quality as well as any bibliographic anomalies should be brought to the attention of the Acquisitions Department. Unsatisfactory microforms should be returned for refund or replacement. Micropublishers that show repeated problems should be identified so they can be avoided in the future.
"Conservation in Morris Library"
Handout

TERMINOLOGY

acid deterioration: deterioration of a material such as leather, paper, etc. from the degradative effects of acids which are present due to the manufacturing process and the absorption of air pollutants.

archival: or archival quality; considered safe for use on materials of permanent research value.

backbone: the back of the book block or the edge which is bound.

book block: a group of bound pages or the book before it receives a cover.

brittle book: one in which the paper has become embrittled or fragile due to acid deterioration. In the extreme, the pages of a brittle book will break off when turned.

case-bound: a mass-produced binding structure where a book block and its cover are made separately and attached in a step called casing-in; the spine of the cover is not glued to the backbone of the book (in contrast to traditional hand binding where the book is constructed as a single unit and the leather is glued directly to the backbone of the book).

casing-in: the operation of attaching a book block to its cover by gluing up the super and end sheets, placing the cover around the book block, and pressing until dry; also "recasing".

fore-edge: the front edges of a book, opposite the backbone and spine.

hinge: the grooved area on either side of the spine where the book block is attached to the cover.

interleaving paper: a thin, smooth, acid-neutral paper placed in a book as a barrier against the effects of acid from an adjacent item.

phase box: a protective enclosure made from heavy-duty grey board, which ties at the fore-edge by wrapping string around a button. Typically, they are used for damaged volumes which cannot be repaired or do not warrant repair.

portfolio: a simple protective enclosure used for thin or lightweight items in need of protection.

protective encasement: a general term for any container which encloses and thus protects a vulnerable item; it must always be custom-made so that the item is held snugly inside without movement.

reversible: a principle of sound conservation treatment whereby whatever is done to an item can be undone or the treatment reversed, without damage to the item.

volunteer box: a more elaborate type of protective encasement; a cloth-covered, super-mull box with a printed spine.
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INTRODUCTION

Much of the work of preservation lies in properly caring for library materials as they are received, processed and maintained within the library. Staff education and training, therefore, are viewed as a vital component of the General Libraries preservation program. In developing this aspect of the program the need for a set of staff preservation guidelines relating to specific library functions was early recognized. The present document is intended to fill this need.

In general terms the guidelines contain information on how to prevent unnecessary damage or deterioration of library materials in particular work areas. The emphasis in presentation is on simple language, practical illustrations and a format which facilitates use as an initial training tool and subsequent reference for continually changing personnel. The materials complement rather than displace existing library orientation programs or training guides.

This loose-leaf manual is a collection of independent modules, each addressing staff preservation guidelines for a particular library function. There is some repetition of text and illustrations between modules, when the information is applicable to more than one function. The complete collection of modules is being distributed only to department heads, since they are charged with ensuring that each employee receives a copy of the appropriate module(s). Observance of this responsibility is essential to the General Libraries preservation program; success of the program will depend upon the sustained efforts of the entire staff.

--1983/84 Preservation Committee

Lynne Brody, Chair
Jane Garner
Jane Garner
Lynne Brody
Wayne Perryman
Jean Offner
Nancy Phillips
Anita Farber
Bill Richter
Jean Offner
Richard Norton
Bill Richter
Richard Norton
William Richter
Lila Stillson
Richard Norton
Darnell Vanghel
William Richter
John Womack

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This manual is intended to help circulation and stack maintenance staff protect the library materials they handle. The basic preservation rules contained here, if followed, will not only keep vulnerable materials available for current use, but also preserve them for use in the future.

1. **The Circulation Area**

   1. **Bookdrops**
      
      While bookdrops provide service when the library is closed or during peak use times, they are major sources of damage to books. Circulation staff can attempt to minimize this damage by emptying the bins or rooms as often as possible. If a bin is employed, it should be carefully positioned below the bookdrop in order to avoid damage to books.
      
      Care should be given to proper removal of books from bins. Gently lift a few volumes at a time, providing adequate support underneath. Do not lift by headbands or boards or toss them in piles either in the bin or on a booktruck.

   2. **Charge/Discharge**
      
      When charging or discharging a book, check to ensure that the date due slip is on the text-side (right) of the front endpaper. If the date due slip has been placed on the inside front board of the book, relocate it if possible to the correct position.

Definitions for terms bold-faced in the text can be found in the Glossary at the end of this manual.
If it is necessary to use two-way strips, insert them between pages (preferably blank pages) as close to the inner margin as possible to avoid loss of text. Two-way adhesive strips must never be inserted between pages where either the text or an illustration is printed across the margin.

4. Problem books

Some categories of problem books are easily identified and should be put aside for review by bibliographers or supervisors. Damaged books, such as those with loose hinges where the textblock hangs, with severe water damage, with damaged or loose spines or covers, and with loose pages are some of these obvious categories.

Refer collections of loose plates, inadequately secured, to a bibliographer or supervisor who will decide what to do with them.

Potentially rare or valuable books, especially those in a state of disrepair, should also be referred to a bibliographer or supervisor.

5. TRANSPORTATION OF BOOKS

Handle and transport books carefully. Improper loading and removal of books from book trucks is one of the most frequent causes of damage to library materials and potentially the most preventable if stack personnel learn proper handling and transportation techniques.

1. Hand-carrying

When hand carrying books, carry moderate, manageable armloads.

2. Book trucks

Place books on trucks in an upright position with no other materials stacked on top of them. If a shelf of a truck is only partially full, keep books vertical with a bookend or with a group of books laid flat to support the others. Do not place them on their foreedges even for a short period of time—as for example when arranging them in call number order—since this...

Definitions for terms bold-faced in the text can be found in the GLOSSARY at the end of this manual.

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Move book trucks carefully on and off elevators, around corners, and in narrow passages, paying special attention to any material which may be protruding. Let your supervisor know if an elevator is not stopping evenly or if a truck seems wobbly or unstable.

Refer also to section C., SHELVING.

1. Unloading book trucks

Many of the above instructions should also be followed when unloading. Refer also to the next section on shelving.

C. SHELVING

It is essential that staff be well informed about proper book handling and placement. In addition to contributing to the conservation of library materials, well-ordered stacks and proper handling techniques serve as a positive example for library users and form the basis for the education of users on preservation materials.

1. Position and placement of books

Place a book on the shelf so that it stands vertically and upright and is gently supported by the books on either side, additional support being supplied by bookends. Books should not be shelved too loosely. They can be permanently bent or splayed if this is done.

Jamming hooks too tightly on the shelf should be avoided. Overcrowding can create problems in the easy removal of books from shelf. Binding damage can also result.

Definitions for terms bold-faced in the text can be found in the Glossary at the end of this manual.
Library book-ends should be free of sharp or rusty edges. When possible, they should support over half of the height of the book and should have a wide profile. When shelving near a book-end be careful not to accidentally "knife" the pages of the book with the edge of the book-end. Report book-end problems to your supervisor.

Fore-edge shelving is unacceptable since it can cause the bookblock to loosen from its case. If a volume is too tall to shelve vertically, it is preferable to shelve it on its spine rather than on its fore-edge.

Whenever possible, avoid shelving books on the top shelf. If library space constraints require that the top shelves be used, always use a kick stool in order to avoid damage in the placement and removal of books.

Ideally, each shelf should remain at no more than 75% of capacity in order to provide for collection growth and to avoid the book damage often resulting from overcrowding. Routinely alert your supervisor to overcrowding in the stacks in order that plans for necessary shifting can be made.

2. Oversized volumes

It may not be possible to stand oversized volumes upright or to provide separate oversized shelving areas in all libraries. If this is the case, oversized volumes should lie flat, no more than three deep on the shelf, on shelves deep enough to support them, or they should be shelved on their spines. Very large tomes, such as those found in art studies, should always be shelved flat.

When removing an oversized book from the bottom of a stack, the books on top should be removed one at a time, and afterward put back in the same manner.

B. CARE AND MAINTENANCE IN THE STACKS

This section is directed at unit supervisors as well as stack maintenance staff. The supervisor needs to arrange for necessary supplies, services or use of equipment and consult with bibliographers when appropriate.

Keeping the stack areas clean and functional often involves the collaborative efforts of staff from many areas of the library as well as custodial and maintenance staff.

1. Vacuuming and dusting

Dirt and dust are very damaging to library books. They can abrade volumes, therefore causing mechanical as well as chemical deterioration. If possible, the stacks unit should borrow a vacuum cleaner with a hand-held cleaning head for periodic vacuuming projects.

Definitions for terms bold-faced in the text can be found in the GLOSSARY at the end of this manual.
COLUMBIA UNIVERSITY LIBRARIES
"CARE AND HANDLING OF LIBRARY MATERIALS"

List of Slides

1. Blank
2. Brittle hook
3. Faintly printed hook, in good condition
4. Fairly hand paper making process
5. Machine paper making
6. Brittle hook
7. Hypothermograph
8. Window AC and fan (typical environmental control)
9. Mold on hook
10. Mold on microfilm
11. Sub-basement (ancient HVAC system)
12. Light failure binding
13. Stack lights on timers
14. Window with shades pulled down
15. Exhaust fumes
16. Particular matter (dirt)
17. Reading room, books being used
18. Books open on tables
19. Book under leg of table
20. Good shelving
21. Next shelving
22. Poor shelving
23. Poor shelving-leaning
24. Permanent damage from leaning
25. Poor shelving
26. Proper shelving using bookend
27. Volumes too tall for the shelf
28. Spine down shelving
29. Improper front-edge shelving
30. Tall book projecting too far into aisle
31. Leaning oversize volumes
32. Good flat shelving for oversize
33. Flat shelving for oversize, not properly used
34. Carrying too many books
35. Improperly loaded booktruck
36. Properly loaded booktruck
37. Properly loaded booktruck, Inc. flat for oversize
38. Teasing headcap when removing books
39. Proper removal of books from shelf
40. Proper removal of books from shelf
41. Proper removal of books from shelf
42. Proper removal of books from shelf
43. Unbound and boxed materials in the stacks
44. Book falling out of protective enclosure
45. Foreign objects left in books-flowers
46. Foreign objects left in books-necklace
47. Materials in process-napkins and rubberbands on every vol.
48. Paper clips left in volume
49. Damage from paperclip-rust and torn paper
50. Damage from paperclip-brittle paper
51. Damage from paperclip-brittle paper
52. Damaging rubberbands
53. Damage from rubberbands-on brittle, unbound vol.
54. Acid migration
55. Collection maintenance unit
56. Selection officer review
57. Shelf for setting aside damaged materials
58. Books being checked out for circulation
59. Bookshop-inside
60. Sort & arrange area
61. Booktruck
62. Cleaning volumes
63. Preservation microfilming candidates-shelves
64. Damage to spine-joint torn
65. Damage to sewing-broken
66. Cover damage-worn
67. Cover damage-cloth binding-damaged
68. Cover damage-damaged book
69. Cover damage-leather binding, joint separated
70. Textblock separating from cover
71. Cover damage-spine
72. Damaging booktape
73. Scotch tape on covers
74. Masking tape on covers
75. Sticky residue from booktape
76. Cover damage-pamphlet binding
77. Unbound volumes in the stacks
78. New overworn volume-does not open flat
79. Volume torn through fold-open flat
80. Broken sewing
81. Damage from photocopying
82. Old overworn volume-brittle paper cracks as pages turned
83. Old adhesive binding-papers loose
84. Torn page
85. Damage from book tape used for tip-in
86. Paper damage from Scotch tape
87. Brittle book-overworn plate torn along fold
88. Brittle book-lilium and text on different paper
89. Brittle book-sewing broken
90. Brittle book-illustrated
91. Brittle book
92. Sending new books out for commercial binding
93. CUL binding slip
94. Volumes rebound in-house
95. Work being done by in-house binding staff
96. Work being done by in-house binding staff
97. Rebinding sequence-before
98. "*" text block with new end sheets
99. "*" after
100. Paper repair-Japanese tissue
101. Protective enclosures-commercial
102. Brittle newspapers
103. Searching tools for microform replacement

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104. Microfilm camera operator
105. Brittle book & replacement microform
106. Book sandwich
107. Food-beer bottle in stacks
108. Food-breakfast spilling on book
109. Food-hook on corner
110. Food-coffee stain
111. Mouse
112. Mice damage
113. Cockroach in card catalog
114. Cockroach damage-view of stack area
115. Cockroach damage-detail
116. Water damage (running title "Death by Water")
117. Water damage-swollen from air drying
118. Water damage-soluble inks
119. Mold
120. Books stored on floor
121. Books stored on floor
122. Boxes of books on floor
123. Causes of water damage-min'
124. " - pipes
125. " - radiators
126. " - open window
127. Building under renovation
128. New construction
The conservation program at Morris Library is one of the few comprehensive programs in the country. Its primary function is to maintain the collection in usable condition. The Local Bindery and Conservation Lab share space on the seventh floor of Norris Library. The conservation program cannot be successful, however, without the help of the entire library staff. Through the efforts of all those handling library materials, unnecessary damage can be prevented. Some of the obvious problems encountered in the stacks are due to patron abuse or ignorance and to simple neglect of stack maintenance. Conditions such as fore-edge shelving, littering, leaning books, and headcap damage cause unnecessary wear.

IDENTIFYING CONSERVATION PROBLEMS

In order to recognize books in need of repair and to provide proper maintenance, one must first understand the structure of a typical case-bound book. A typical book is made up of the book block (or group of bound pages) and a protective cover. To reassemble a book, end sheets made of heavy paper are first tipped onto the book block. A woven cloth called super is glued to the backbone of the book block. This super, along with the end sheets, is used to attach the book block to the cover. A strip of scrap paper is then glued to the backbone to help secure the super. At this point the book is ready to be casered, or reattached to its original cover. This drawing (which is also included in the handout) represents the same concept of book structure.

When handling books, one should be aware of the general condition of the volume. If the book block is sagging or pulling away from its spine, the hinge area needs to be tightened. This is a common problem that can be easily repaired. However, these items cannot be identified by simply looking at the volume on the shelf; they must actually be handled. Some repairs are easy to recognize without close examination, but others require care. In some instances, the paper of the book has become fragile due to acid deterioration. In cases such as this, the item cannot be repaired. If pages have actually broken off, the book should be sent to the Conservation Lab for brittle book processing. Because of the overwhelming number of brittle books, those which are intact and not in current use may remain on the shelf.

REPAIR & MAINTENANCE

If a book in need of treatment can be caught before extensive repair is required, treatment can be simple and inexpensive. For example, the cost to tighten hinges is only $0.50, whereas having a cover replaced commercially costs $5.62. The time required for processing and repair also varies significantly depending on whether the item can be treated in-house. The time required for in-house repair is minimal because the procedures are relatively simple. Loose hinges are tightened by applying glue with a knitting needle and pressing until dry. It is important to apply the glue to the hinge area only; the spine of the cover should never be glued to the backbone of the book.

Often the spine becomes damaged because of rough or careless handling, exposure to ultraviolet light, and normal wear and tear due to frequent use. If caught before further damage occurs, it can be repaired quickly and inexpensively. The old spine is carefully removed and the bookcloth of the cover is peeled back slightly to allow a new spine to be attached under the cloth of the cover. The new spine made of bristol and matching bookcloth is attached by gluing one side to the hinge and cover. The spine itself is never glued. It is important that the new spine is properly affixed to the hinge. The other side is then attached in the same manner. Once the new spine is in place, the bookcloth which was peeled back is then reglued. If the bookcloth matches closely, the repair is not very noticeable. When the procedure is completed, the book must be allowed to dry in a book press so that the hinges become tight once again. The original spine is trimmed to remove the frayed edges and re-attached or mounted onto the new spine.

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In some cases, a book cannot be bound or repaired due to its unusual format. A small volume of loose plates or pamphlets, for example, should not be shelved without protection. A portfolio can be constructed which encases the item and prevents the loose sheets from falling out.

Other items require protective encasement because they cannot be repaired, such as this volume affected by bookworm damage. A "phase box" can be constructed to fit the book exactly so that there is no movement inside the box which could further damage the volume. The book should always be placed in the box right-side up with the spine to the left so that it will sit on the shelf properly.

There are also some books which are boxed because they should not be repaired, such as old leather volumes with detached covers. Interleaving paper should be inserted inside the covers when there is evidence that acid in the leather cover has begun to damage the pages. Grosgrain ribbon is used to hold detached covers in place. The knot should always be placed at the fore-edge of the book. The item is then encased in a cloth-covered, clam-shell box called a colander box. Both the box and the book are charged out.

With an average book costing $25, one can realize the impact which the conservation of library materials can have on the budget for purchasing or replacing materials.

HANDLING PRACTICES

There are a number of ways that each one of us can prevent damage which occurs in handling library materials. Often it is just a matter of correcting bad habits. Careless handling of books not only results in damage but also shows a lack of respect for library materials which may be imitated by library patrons. It is our responsibility to educate patrons as to proper handling in an effort to conserve resources. If staff members have a poor attitude toward conservation of library materials, how can patrons be expected to develop the proper attitude? Books should be handled with care and never tossed or dropped. Carry only a few books at a time, always providing support and setting them down with care.

When loading a book truck, never fill all the shelves on one side and then attempt to move the truck. This makes the truck imbalanced which causes it to tip when in motion. The books inevitably will slide off, causing considerable damage. If only one side of the book truck needs to be used, the books should be placed in the middle of the shelf.

Never load a truck with the books placed on their fore-edge. Fore-edge shelving is never acceptable, even as a temporary measure. This can cause the book block to loosen from its case, especially with oversize or heavy volumes. If the volume is too tall to shelve vertically, it is better to shelve it on its spine rather than on its fore-edge.

To properly load a book truck, care must be taken to evenly distribute the weight. The top shelf should be filled first, with the book stationary and the shelver moving from side A to side B. The shelver remains on side B to load that side of the second shelf, then moves to side A to complete loading the middle shelf. Extraneous materials such as paperclips, bookmarks, or pressed leaves should be removed before reshelfing. This is also an appropriate time to select items in need of repair. The shelver remains on side A to load one side of the bottom shelf and finishes on side B. Never overload the truck.

It is important not to crowd too many books on a shelf. Books should be spaced far enough apart so that they may be easily removed. Pages can also be crushed by pushing a volume into a booksheet. Always use a stool when shelving overhead. This allows you to read the call numbers accurately and handle the books properly. Reshelfing is an opportune time to practice stack maintenance. Such habits as straightening books should be a normal activity during shelving. When properly used, bookends can prevent a row of books from leaning.

Large folio-size volumes should always be placed flat on the shelf, no more than four volumes high. It is necessary to move the top volumes before removing a lower one.
Never remove a book from the shelf by pulling at the top of the spine. Headcap damage such as this can be prevented by first pushing in the two adjacent volumes and then grasping the book firmly by its sides when pulling. Often, spine damage occurs by tugging or grabbing at books on the top shelf. Always use a stool to reach an overhead shelf so that the volume can be properly removed.

It is important to maintain good housekeeping practices such as removing litter from the shelves and dusting. (Simply pushing the dust around does not remove the dirt.) When shifting the collection, clean can be easily done. Books and shelves should be vacuumed with a hand-held vacuum cleaner available for loan from the Conservation Section. For ranges that are very dirty but where shifting is not required, books can be vacuumed directly on the shelves by adjusting the amount of suction. Individual books should be cleaned with a One-Wipe brand dustcloth which is chemically treated so that it picks up the dirt.

Under no circumstances should Scotch tape or any adhesive tape be used to mend a torn page or insert loose pages. Over time, the tape breaks down, leaving adhesive residue and permanently staining the paper. This is often a serious problem because well-meaning patrons try to "repair" pages themselves. Nor should a cover (or the binding) be mended with masking tape, electrical tape or so-called "book repair" tape. The damage caused by these pressure-sensitive tapes is not reversible. There are certain tapes which are considered "archival," or safe to use because the process is reversible. Filmoplast is one of these archival tapes, although it is only used on a limited basis. It is suitable for taping small tears in new maps or repairing torn covers of unbound periodicals. All other mending problems should be routed to the Local Bindery for repair. In the bindery, tears are mended with a strip of Japanese paper torn to fit the size of the tear. Wheat starch paste is used to affix the mending paper to the tear. The mended page is then allowed to dry, with the aid of a strip of blotting paper. When properly done, the result is a nearly invisible repair.

One of the most serious problems affecting all libraries is the mutilation of books and journals. The most common mutilation problem is journal articles which are ripped out. Other forms of mutilation are underlining, turning down pages, and cutting out pictures or coupons. A partial solution to this problem is to educate the patron as to the seriousness of the problem. Many are unaware of the expense involved in replacing missing pages, the inability to replace certain items, and the frustration it causes other patrons. Even after efforts at education, some selfish people will continue to mutilate. Therefore it must be stressed that defacing state property is a serious crime and the offender can be prosecuted.

Another type of book abuse is rough handling while photocopying. A book should never be forced open in order to obtain a clear copy. This places a strain on the book's structure and can damage the spine. Nor should the cover of the photocopy machine be used to put additional pressure on the book. The proper way to photocopy is to support the volume while copying, applying only gentle pressure on the cover.

Phonograph records are put into special binders designed to protect the disc. Loose pamphlets which accompany the record are sewn into the binder. Like books, it is important that records are not allowed to lean as this will cause warping.

Common sense should be used when handling maps. Do not try to remove a single map from the bottom of a drawer. The weight of the maps on top of it can be considerable, causing the map paper to give way, especially at the corners. Groups of maps should be stored in folders within a map drawer to allow easy removal. A stool should be used for higher drawers so that the item can be more easily located and removed. Care should be taken in removing items so that strain is not placed on the map paper; folders on top should be removed before a lower one is taken out.

With proper handling and continued maintenance, this unnecessary damage can be eliminated. Conserving library resources requires just a little effort on the part of each one of us, yet has a tremendous impact on prolonging the life of a book.
General Disaster Guidelines

There are some practical steps to consider when organizing a disaster prevention and action plan. The first group below covers prevention and pre-planning suggestions. The second list offers ideas for action if a disaster or problem occurs.

PREVENTION AND PRE-PLANNING

1. First, an emergency phone list of library personnel with current numbers is important. The list should be distributed to fire, police and administration. One person must be designated to receive the call, assess the problem, and initiate the phoning of others if necessary. If people are assigned "vital" jobs, they should also designate a back-up person.

2. Priority areas within libraries should be established so everyone knows which is to be saved first, second, etc. if that decision has to be made. These priorities should include also which materials can be abandoned if necessary when cleanup time comes. Remember to save the shelf list or catalog. A second copy on microfilm off the premises is desirable.

3. Emergency procedures for dealing with fire, flood, bomb threats, tornadoes, etc. must be clearly understood by all staff.

4. Sources for emergency supplies should be located and contacted ahead of time in case of disaster. These might include: generators, pumps, trucks, forklifts and pallet movers, freezer space, cartons and freezer wrap, fumigators, fans, dehumidifiers, sling psychrometer (for measuring temperature and humidity), book carts or trucks.

5. A list of resource people such as plumbers, electricians and carpenters should be included.

6. Staff members should be knowledgeable about where to turn off electricity, water and gas, or know who can respond immediately.

7. Have a ready list of conservation experts to call upon for advice. Remember that the Library of Congress has preservation experts available for emergency advice and consultation.

8. Have a small stockpile of emergency supplies on hand. Plastic sheets to throw over book ranges may save precious volumes while pipes are being fixed. A wet-dry vacuum or mop up equipment will prove invaluable. A roll or two of clean newsprint will offer opportunity to start air-drying a few wet books immediately.

9. Fire extinguishers readily available and current are necessary. Having staff trained to used them appropriately is important. Use only extinguishers appropriate for paper. Knowing what to do to keep fire isolated to one area until the fire department arrives may destroy one section but save the library.
10. Set up an accounting system with authorities so it can be put into play immediately - or understand the process already set up. The lack of this in a large organization may cause time-consuming delays.

**ACTION**

1. First, don't make hasty and foolish decisions. Follow your plan, consult experts, proceed with deliberate haste.

2. Make sure the building is safe to enter. In case of standing water, be sure all electrical hazards are eliminated. Wet floors are very slippery, personnel should be warned. The fire department will always make the final decision on the safety of the burned building. Listen to them - don't assume in your anxiety that they are trying to slow you down.

3. Once in a disaster area, assess the damage as carefully and logically as possible. Have personnel who are familiar with the material assist. Take careful notes on the material as it is for insurance purposes as well as planning. Photographs are very helpful. Inform your insurance carrier or risk management office.

4. After a first assessment, retreat to a quiet place to decide your plan of action. Contact experts who have had experience and ask advice after explaining the situation as carefully as possible.

5. In case of water and smoke, vent the building as soon as possible. It is imperative to bring down the temperature and humidity. Turn off all heat, and if possible turn on the ventilation system, even the air-conditioner. If need be, break out windows. Measure temperature and humidity and keep track of it so you will know if it continues to fall.

6. If parts of the building are safe, but a roof has been lost, cover material to avoid further damage from exposure.

7. If large amounts of material are wet, put your action plans into effect to get them to a freezer. This involves keeping records of material, handling all wet material with extreme care, loosely wrapping individual items so they won't stick to each other, boxing items one layer deep and spine down in boxes, and sending to a freezer facility where temperatures are at least -20° F. If material is floating in deep water, you may have to have the water pumped out first. As long as material is submerged there is much less danger of mildew. Therefore, weigh how much you can handle at a time, and leave the rest submerged until you can rescue it, but the quicker the better. Material coated with mud, slime, or sewage can be rinsed very gently under cool running water before packing if necessary.

8. Material just slightly damp can be air-dried in a cool, dry facility. It should be stood on the head end with pages slightly fanned if possible. The surface of the table should be covered with clean layers of newsprint. As the book dries, the pages should be interleaved with newsprint or white paper towel. As the towel becomes damp it should be changed. Air should be kept circulating, the temperature and humidity kept as low as possible. Interleaving sheets may be impregnated with thymol if desired to help prevent mildew.
9. In large areas where mildew appears, fumigation with thymol may be necessary. Call upon a professional exterminator to do this.

10. For single sheets, flat material, prints, etc., drying may take place flat and between blotters or several sheets of clean newsprint. Extreme care must be exercised with art prints to avoid destruction of the medium.

11. All film, slides, photographs can be immersed in distilled water (or cold, clean water) and sent immediately to the nearest photo processing lab alerted ahead of time to the arrival. (Caution: some emulsions may be water-soluble.)

12. Be careful about making on-the-spot decisions if it is not necessary. Your pre-plan should have helped you decide what material can be lost if it needs to be. Everything will tend to look impossible at this point, and material you may decide to discard as hopeless, will often be salvageable.

13. Burned and charred material requires special care in handling as the paper and bindings are very brittle. Support single sheets on cardboard and secure them with another sheet of heavy paper or card on top. There are ways to remove the smell of smoke, the most effective is by using a vacuum chamber and ozone. Many times burned books are easier to replace than restore, but this depends on the kind of library and its materials. Perhaps having materials available for research use until new material can be bought is worth saving much in spite of obvious drawbacks.

14. Once material is frozen, it can stay that way for a long time. This gives you a chance to consider various alternatives for recovery. Even if air-drying is decided upon, freezing material allows you to dry what you can handle at one time without being overwhelmed. And freezing at extremely low temperatures offers the added advantage of drying out material in the freezer while it sits there.

15. If you are missing a roof, walls or doors, arrange for security. Also put into effect that part of your plan for moving out everything, re-roofing, or whatever is appropriate.


17. All floors, shelves and surfaces touched by water and/or smoke must be thoroughly scrubbed. This should be done with a formalin solution or other mold inhibitor like thymol dissolved in methylated spirits. Care must be exercised in their use.

18. Large masses of frozen books can be dried successfully by the vacuum process. In one process, the ice is sublimated (vaporized without first melting) and collected on a panel to be drained off after a load is done. In another process the water is evaporated under pressure and drawn off. These successful methods have been described by Corning Glass Museum and Library, Stanford University Library, McDonnell Douglas, General Electric and Lockheed.
Thoughts on Mounting Exhibits

Conservation Office

1. Do not allow contact between paper of unknown characteristics (acidic, high lignin, etc.) and leather bound volumes. Do not place exhibit cards or information sheets on top of books unless acidity is checked and is neutral or higher.

2. Do not oil leather before an exhibit unless exhibit cases are environmentally controlled.

3. Control the light, be especially wary of UV light as spewed forth by fluorescent tubes. Employ UV shields in cases.

4. Do not lean one heavy book against another, as extreme stress results in vulnerable areas such as hinges. Always use a book cradle or comparable support.

5. Avoid using the book on display as if it were itself a pedestal - don't place another book on top, or an artifact.

6. Never, under any circumstances, place fine old books upside down in the display case to show off bindings or covers unless well-supported on a special cradle.

7. Mylar strips or smooth glass blocks may be used to hold pages open.

8. Keep book spines off hard surfaces, use a pad underneath, or a cradle.

9. Be especially sensitive to leather on the spines of old, tight books, and the hinges of hollow backs.

10. Do not force a tight book open. Make a special cradle to hold it and use mylar strips to hold it open at a natural angle.

11. For extended exhibits, or with especially precious material, turn exposed pages daily.

12. Manuscripts may be exhibited and handled easily by mylar encapsulation.

13. Single leaf items must never be mounted directly against glass - good museum board mats are a must.

14. Water colors, especially with pale, faded colors, or tinted prints and maps cannot bear any exposure to natural light. Even a few hours of direct sunlight will cause serious damage to such items as well as photographs.

15. Keep track of the temperature and humidity inside the display case. You may be creating a miniature hostile environment.
CONSERVATION SERVICES

Binding Preparation Workshop
Bob Parliament -- Leader

Program Outline

Prebinding Overview

Bookbinding Structure, Slide Presentation
Serials Role & Requirements -- Tina Feick
Prebinding Functions
Binding Preparations & Book Repair Handbook
Binding Styles & Samples
Discussion
INTRODUCTION

Conservation Services has been established at Princeton University Library to provide processes, treatment and consulting services for preservation and conservation of library and archival materials. Our major goal is to increase the useful life of collections. We actively pursue this goal through:

1. Preservation: Examination of deteriorated materials to select the most efficient and effective alternative to stabilize the condition of the item under consideration.

2. Processing: Prebindery records and controls all items sent to the commercial binderies.

3. Treatments: Book Repair performs mending, repairing, and rehousing of books and paper to conservation standards, and/or deacidification: the spraying of books with an alkaline solution to neutralize destructive acids in paper.

Alternatively, increasing the life of collections may result from consulting staff about storage, lighting, heating, binding design, shelving, or training.

These Guidelines have been prepared to assist staff in binding preparations and the use of our other services. They will be constantly updated until we e are confident that the book with fully covers the subject. We would appreciate your

Bob Parliament

CONTROCT PEOPLE

CONSERVATION SERVICES

Lost Book Inquiries, Preservation Unit
Conservation Librarian
Preservation Coordinator
Head of Treatments
Assistant Supervisor and Prebindery

SERIALS DIVISION

Serials Librarian
Assistant Serials Librarian
Serials Supervisor
Pre-order and pre-cataloging

CATALOGUE DIVISION

Serials Team

Team Leader
Cataloguer

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NOTES ON PRESERVATION

A comprehensive preservation program includes preventing damage to materials as well as treating materials as they become deteriorated. The following notes provide information and guidelines on how to prevent damage. They should assist all library staff in the proper care and maintenance of the collections. Further detail on topics dealt with in these "Notes" may be requested from the Preservation Department [x2223x]. All staff are encouraged to suggest additional topics for inclusion in this section.

5.1 SHELVING

Proper shelving can greatly extend the useful life of library materials. Unnecessary damage can be prevented by recognizing destructive shelving practices that cause the breakdown of a book's binding structure. Volumes incorrectly shelved and handled give way to stresses that can permanently warp bindings, tear a book from its cover, crack spines, and ripple brittle pages. Attention to good shelving practices and keeping shelves neat goes a long way toward preserving our library collections and encouraging users to follow our good example.

5.1.1 REMOVING VOLUMES FROM THE SHELF

Do not pull a volume off the shelf by the head cap of the spine. Push the two volumes on either side of the desired volume back slightly, leaving the book free to be grasped solidly.

Tilt out the first volume in a tight row by placing a finger on the top of the book and tipping forward far enough to grasp the volume.

Push in bookends after a volume is removed to keep remaining books straight.

Large volumes shelved flat should be removed one at a time and placed on a table for use.

Use a step stool to reach high shelves.

5.1.2 RESHELVING

Shelve books vertically, in an upright well-supported position. Make sure each row of books is straight and supported by a bookend.

Place books too tall for the shelf spine down, but avoid volumes projecting out into the aisle.

5.2 CLEANING BOOKS AND STACK AREAS

Particulate matter, dust, soil and dirt is an unending threat, especially in New York City. Dirt is more than an unsightly nuisance; it can abrade book materials, and introduce destructive chemicals which hasten deterioration.

Whenever sections are being shifted, dust each volume before placing it on the new shelf. In addition, establish a regular cleaning cycle aimed at working through the entire collection every three to eight years (depending on the size and value of the collection, local dirt conditions, and use patterns). This thorough cleaning should include removal of every item, cleaning shelves and each volume. If possible, use a small vacuum cleaner with soft-brush attachment and Endust-treated cheese cloth. Do not use the mineral oil-impregnated cloths provided to the Facilities staff. Work from the top shelf down, exercising extreme caution in handling brittle items. During this process, damaged or deteriorated volumes can be identified for treatment.

Units undertaking a cleaning program for the first time should consult the Preservation Department. Eliminate foreign materials from the stack area. Food, drinks, and smoking apparatus should never be permitted around shelves. Shelf labels should be of the type which fit into brackets on the front-edge. If tape must be used, be sure it does not extend above or below the edge of the shelf; this is necessary to keep the adhesive from the books.

5.2.1 KEEPING OPEN STACKS NEAT

The natural tendency is to leave things as they are found, or more so. If books are haphazardly sprawled on shelves, users are likely to be casual about handling them. But if they're upright in neat rows, users will tend to keep them that way, and may even straighten up a toppled row if it is a conspicuous exception to overall neatness. Give enough time to straightening and cleaning to create an overall impression of care for the

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books so that readers will be inclined to perpetuate the arrangement.

5.2.2 STAFF FOR SHELF MAINTENANCE

To accomplish all these things, one person should be given specific responsibility for the appearance of the shelves in a large stack area, this responsibility may be divided, by area, among two or more assistants. A crash program of straightening up may be easily combined with re-shelving, shelf-reading, weeding, etc. The responsible person should have these notes as a guide, and should be encouraged to suggest major shifts, rearrangement of shelves, requests for more book-ends, etc., as appropriate.

5.3 MICROFORMS

Microforms have their own specific requirements for proper handling and storage. Safeguards against mishandling will prevent unnecessary wear and tear. Microforms are easily scratched and torn if not handled correctly. Because of the heavy use of microform service copies in libraries, the more rigorous archival standards established for the storage of master negatives are impractical. However, since repair and replacement of any library materials are both costly and time consuming, all efforts at proper care and handling will help to extend the useful life of microforms.

5.3.1 HANDLING

Clean, well-maintained reading equipment can prevent damage to film. Dust and dirt on glass flats scratch and abrade the emulsion obliterating the image. Clean equipment regularly and keep lens housing covered when not in use.

Handle microfilm only by the edges or by the leader; and fiche by the header. Fingerprints leave oils and acid on the surface which blur the image and attract dust and dirt.

When working with a large quantity of microfilm or fiche, use white cotton gloves to avoid fingerprints or scratching.

Tests that are spotted should be repaired before the film goes to the shelf. Further damage can occur when torn film is used on a reader. Torn film can be repaired by the Reprography laboratory staff using splicing equipment. Pressure sensitive tape should never be used to repair tears. Film with extensive damage (where text is lost) may need to be replaced.

Roll film should have adequate leader and trailer for easier handling (at least 18" of blank film at each end). Users will be able to load reading equipment more easily, preventing damage from fingerprints. Leader and trailer can be spliced to film by the Reprography staff.

5.3.2 STORAGE

Microfilm should be stored on plastic reels, in closed boxes. Metal reels with sharp edges should be replaced with plastic; damaged or worn boxes should be replaced to keep out dust and dirt that can scratch film.

Remove all rubberbands on microfilm reels. Sulfur in rubberbands causes chemical reactions that damage film; and even sulfur-free ones can damage.

Full reels of microfilm will stay neatly wound by themselves; shorter titles that tend to unwind should be secured with paper wrap-arounds available from the Reprography Laboratory.

Rewind microfilm reels firmly but not too tightly. Film wound too tightly may buckle or scratch and film can stick together when temperature and humidity are high.

Fiche are best stored in individual paper envelopes. This provides protection from dust, dirt, and abrasion. Remove any plastic wrappings or rubberbands for storage. Filing without envelopes is not harmful if temperature and humidity are kept low to prevent the sheets from sticking together.

5.3.3 INSPECTION

All microforms being added to the collection should be visually inspected for completeness, overall appearance, and readability. Some of the problems to watch out for are:

- blurry image
- deep scratching
- too light or too dark image
- anything that causes the image to be illegible
- missing or out of order pages, issues, etc.

The Reprography staff is available to help confirm these problems.

Microforms produced outside the Reprography Lab with
problems of image quality as well as any bibliographic anomalies should be brought to the attention of the Acquisitions Department. Unacceptable microforms should be returned for refund or replacement. Micropublishers that show repeated problems should be identified so they can be avoided in the future.

5.4

CONSCIOUSNESS-RAISING AMONG PATRONS AND STAFF

5.4.1

USER AWARENESS ITEMS

Consciousness-raising bookmarks, stand-up signs and photocopying posters designed by the Preservation Committee are available from the Preservation Department. Please request supplies as needed.

5.4.2

AUDIO VISUAL PROGRAMS

Audio-visual programs from various libraries are available through the Preservation Department. A department may contact the Preservation Department for a training session on any aspect of preservation.

5.5

DISASTER PREPAREDNESS

The Disaster Preparedness Plan is available in every department of the library. It is in a red binder and should be accessible to all staff. It is the responsibility of the Preservation Department to come to your aid in a disaster situation and the Head of the Preservation Department should be notified immediately. Please become familiar with the Disaster Preparedness Plan.

6.0

COLUMBIA UNIVERSITY LIBRARIES PRESERVATION COMMITTEE

In the Fall, 1981, a Columbia University Libraries Preservation Committee was established.

6.0.1

CHARGE AND MEMBERSHIP

Charge: To advise and assist the Head of the Preservation Department in determining preservation needs of the library system; to serve as liaison and resource persons on preservation; to assist in setting goals and priorities relating to preservation; to consider policy and procedures in relation to preservation; to accomplish specific projects relating to preservation.

Membership: Librarians and supervisory staff chosen in consultation with Group Directors and Distinctive Collection Librarians.

Representation: Technical Support (1)
Services (3)
Resources (1)
Distinctive Collections (2)

Resulting in a membership of seven, with two year overlapping terms, with reappointment capabilities.

6.0.2

MAJOR PROJECTS OF THE PRESERVATION COMMITTEE

6.0.2.1

The Disaster Preparedness Plan

6.0.2.2

Patron and staff awareness posters, bookmarks, and stand up signs.

6.0.2.3

An environmental survey and recommendations in the area of environment.

6.1

THE RLG PRESERVATION COMMITTEE

The Preservation Committee is one of the programs of RLG.

6.1.1

GOALS

The Preservation Committee is charged to provide the President with advice on projects required for the establishment of a cooperative preservation program within the partnership. Specific counsel should be given on, but not limited to, the following:

1. Development of a plan for sharing preservation responsibilities and ensuring continuing availability of research resources in all appropriate fields.

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2. Development of a means to exchange information regularly about items preserved at member institutions.

3. Definition of policy issues governing preservation responsibilities of RLG members that correspond to their collecting responsibilities.

4. Systems development work required to use RLIN effectively for preservation purposes, e.g., sharing information about items preserved, provision of management reports, etc.

5. Evaluation of available technologies related to preservation to determine RLG's potential role as a site for pilot projects, testing, or experimentation.

6. Identification of special data bases or retrospective conversion projects that would expand coverage of information within RLIN and assist in supporting rational cooperative preservation policies.
This procedures manual gives detailed, step-by-step descriptions of established Preservation Division routines and reflects current practices. Any of these routines may change in the future; at that time the procedures manual would be updated. The manual documents the entire range of what can happen to a book once it is charged to the Preservation Division office.

The Yale Preservation Department is responsible for the maintenance of the Yale University Library's research collection in usable condition. It is comprised of three divisions: Preservation, Preparations, and Conservation. Each division has its own area of responsibility and expertise, and all three work closely together to find solutions to the problems of collection preservation. The Preservation Division has direct responsibility for the main:tenance of the circulating collections housed in the Sterling Memorial (SML), Sterling C. Mudd (SCM), and Cross Campus (CC) libraries; it serves in an advisory capacity to special collections and to the school and department libraries in the YUL system.

Items in need of preservation attention are referred to the Preservation Division by the Circulation Department. The division staff charges material into the office and conducts a thorough search to determine how the item fits into the collection as a whole; whether or not the item is commercially available, and, if so, in what format and at what price; and the physical condition of any relevant volumes. This information allows the appropriate subject specialist to make a decision about the disposition of the deteriorated item(s).

The forms used, records kept, and thorough preservation search conducted were all developed to suit conditions at Yale's Sterling Memorial Library and to fill the needs of that collection. Each procedure can be adapted to fill local needs, each step revised to fit local conditions.

**PROCESSING BOOKS**

Items that are in poor condition or that have other preservation problems are sent to the Preservation Division. Circulation personnel will bring these items to us or books are placed on the table by the supply cabinet in the Circulation Department Office where we pick them up. Each item is examined and screened.

1. Can item be sent for New Case Only (NCO) or pamphlet binding (pam)?

   YES: Charge into Preservation Office.

   NO: Charge book into Preservation Office.

2. Books can be sent to a commercial binder for NCO if the paper is sufficiently strong and flexible, and if the leaf attachment is sound. If the item's imprint is pre-1900 and meets the criteria for NCO, a search must be done to check if it might be a Beinecke candidate. See page for criteria for NCO. Small items of 4" thickness or less with strong flexible paper can be sent to the in-house repair unit for pamphlet binding. See below. Follow instructions for NCO, p. 81. See section below for charging in items.

3. Can item be sent for New Case Only (NCO) or pamphlet binding (pam)?

   YES: Charge into Preservation Office.

   NO: Charge book into Preservation Office.
1. Make out search card.

   a. Call number
   b. Complete author entry, and
      translator, editor if applicable
   c. Complete title
   d. Place, publisher, publication date
   e. Series note (if any)
   f. Barcode # (if item has one)
   g. Stamped shelf date (each search
      shelf will have a different date.
      Fill one shelf before changing
      the date stamp and starting a
      new shelf.)
   h. Any information or special
      instructions regarding the book
      (i.e. repair only, missing pages,
      charging info). See p. for
      instructions on handling fragments
      and empty covers. "Repair only"
      would be noted for volumes.

2. Make out charge card.

   a. Call number
   b. Brief author and title
   c. Barcode # (if item has one)
   d. Publication date (if no barcode)
   e. Stamped shelf date.

3. Place book on dated search shelf.

   a. Make sure the search card is in the
      book so that the call number can be
      seen. Fit as many books as is
      reasonable without cramming on the
      shelf. Books are usually laid flat.

4. Place charge card in file to go
to Circulation.

5. Input and/or update location on
GEAC.

6. File the charge cards in the
"In-Process" file.

7. The number of books charged in
are recorded on the statistics
sheet.

8. Someone from Preservation will take
the charge cards to Circulation
periodically (at least once a week)
to update the location on GEAC. If
the book does not have a barcode,
Preservation staff will add the title
to the date base and attach the
assigned barcode to the charge card
with double-sided tape. See page
for procedure.

9. Cards are filed by call number.

SIE EXAMPLE FOR FORMAT
DISCHARGING BOOKS

The procedures for annotating search cards prior to discharging a book from the Preservation Office are given with the description of the individual process (NCO, replacement, etc). This section concerns the handling of the small charges filed in the main charge card file.

1. Full charge card from file. Cross out call number.

2. If the book has a barcode, attach barcode to charge card using a paperclip.


   NO: Replacement

   Transfer

   Discard

4. Annotate search card.

5. File search card in Misيري file.

6. Annote the charge card.

Upon receipt:

NCO

Check all books received in Preservation to determine if any can be sent to a commercial binder for NCO. For any books that can be sent for NCO proceed as follows:

1. Is this volume part of a set or series?

   YES: Check all other volumes in the stacks for condition.

   NO: Proceed to step 2.

2. Charge book in.

3. Is there a barcode in the book?

   YES: Remove barcode and attach it to the search card.

   NO: Proceed to step 4.

4. Annotate search card.

5. File by call number.

6. "To B for NCO," number of volumes, volume number in parentheses and the date.

All volumes of a set or series needing NCO are sent at one time. Note color of other library bindings.
1. File charge card in Main file.

2. Put flag in book instructing Preparations to "Return to Preservation."

3. Put flag specifying "New Case-Only" and the binding color if necessary.

4. Put books on the Preparations shelf.

5. **SIE EXAMPLES**

7. File by call number.

9. Specify color if book is one of a series or set bound in one color (or a predominant color.)

10. Preparations staff collect materials from this shelf on Friday mornings.

NCO

Books with loose, torn, or broken bindings can be sent to a commercial library binder for NCO if the paper is strong, the leaf attachment sound, and the textblock intact. The condition of the paper can be checked by folding a corner of a page; the paper must be able to withstand a double fold. If more than one type of paper is used, check all types. The leaf attachment must be sound and the textblock in one solid piece. If only the first or last pages are loose, they can be tipped down by Preservation Office staff, and the book can then be sent for NCO. If more involved repair is necessary (i.e., saving the textblock, page repair), the item can be sent to Conservation for NCO preparation.
WITH DUTY

1. With the reissued volume in hand, pull the search card from the Bindery file.

2. Annotate search card.

3. Have all volumes on search card been returned?
   YES: Annotate search card and file in dead file.
   NO: Refile search card in Bindery file.

4. Discharge cards for returned volume(s).

5. Examples for format

PRESERVATION SEARCHING: I - CATALOGS

1. Pull one shelf's worth of search cards.

2. Alphabetize cards by main entry.
   Is there a main entry?
   YES: Proceed to step 3.
   NO: Check shelf list.

3. Check each entry in the card catalog, namely the Public Catalog (PC). Compare entries for corrections or additions.

4. Add the number and dates of volumes for a set, or total holdings with dates for a serial.

5. Note other editions of that title.

6. If Yale owns no other editions of copies of that title, enter "only c. ctY." Other editions should be noted with the
date of publication underlined, the call number (if the first part of the call number duplicates that of the volume being searched, show three dots and then the part of the number which differs), the number of volumes, and any special notes (5th ed. or editor's name if different). Volumes in other collections need only show the date of publication and the collection name. Show where the volume being searched fits in by date with a caret (>). If an exact duplicate is held elsewhere, show it by "Same" with the location underneath. If item in hand is a translation, search catalog for other editions only in language of item in hand. Note translator's name. Also note existence of any editions in original language and/or in English. Take extra blank search cards with you in case you need them.

8. Check any entries not found in the Public Catalog in the Shelf List Catalog under the call number and recheck in the PC. SEE EXAMPLES FOR FORMAT

6. Note if Yale owns different titles by that author.

7. Note if there are collected works of that author at Yale and if the works contain title being searched.

8. If so, enter "Others" on the far right; if no, enter "Only."

7. If none are found (works are listed before all other titles), enter "No Wks" on the far right. If there are works in the same language as the volume being searched, show the call number.
WATER LEAKAGE AND FLOODS

1. Call the University Police (x2222) and report.
2. Call the Building Marshal (x3535) and report.
3. Notify the Salvage Team. Call to power lines until a number of lines is reached.

   Ellen McComas 2529
   Paul Larson 2635
   Robert Larson 2636
   Henry J. Lillemoe 2600
   Vernon Harward 2618
   Carlson 2613

4. Turn off and plug any electrical equipment in the path of spreading water. Do not stand in water which may be in contact with live wires.
5. Cover affected areas with plastic sheeting and tarps.
6. Remove any material from shelves.
7. Remove affected areas and place in secure area. Call Art Department (x2001).
8. Evacuate and secure the area affected by flooding.
9. Follow instructions from University Police and the Building Marshal.
10. Complete a BYU Accident Report for Student or Guest or a Supervisor Report of Accident and submit to Building Marshal.

ACCIDENTS AND MEDICAL EMERGENCIES

1. Call University Police (x2222) and report.
2. Call Building Marshal (x3535) and report.
3. Keep victim still - DO NOT MOVE.
4. Cover victim with blanket, coat, etc.
5. Administer first aid if trained.
6. Clear area of spectators.
7. Stay with victim until help arrives.
8. Determine cause of accident; report to Building Marshal and correct if possible. If it is not possible to correct, post a warning sign.
9. Follow instructions from University Police and the Building Marshal.
10. Complete a BYU Accident Report for Student or Guest or a Supervisor Report of Accident and submit to Building Marshal.

ACCIDENT & MEDICAL EMERGENCIES

FIRE

CRIME/VANDALISM

EXPLOSIONS

WEATHER EXTREMES

BOMB THREATS

EVACUATION (Non-Life Threatening)

EVACUATION (Life Threatening)
I. A. Measure length and width of book, using ruler and triangle.

Turn book over and repeat.

Take largest of both measurements.

B. Measure height of book. Place a board on top of book, apply gentle pressure and measure with ruler.

C. Cut a piece of scrap board the exact length and width dimensions of the book. This will be used as a guide. On this piece mark in pencil the measured height of the book. Mark an additional measure of 1/16" on this gauge.

II. A. Cut a piece of board (piece A) sufficient to wrap around the book (Three times the width plus two times the height), plus at least 2" and cutting it the exact length of the book. (Grain should run vertically)

B. Cut another piece of board (piece B) sufficient to wrap around the length of the book (two times the length plus 2 times the height), making it the exact width of the book. (Grain should run vertically)

III. Beginning with piece A:

A. Measure 2" from left, mark with pencil point and using ruler, draw a line.

B. Measure a tab, approximately 1" in width in this area.

c. With the scrap board guage you have cut out, position on piece A and mark with pencil on the right side top and bottom. Remove guage and score between these points with ruler and bone folder.
D. With height of book measurement which has been marked on the guage, measure from the first score, top and bottom, adding the additional 1/16". Mark with pencil point and score.

E. Using guage, position on piece A, placing left corners of guage next to the last score line. Mark piece A top and bottom at right corners of guage. Score.

F. Using height measurement on guage, mark top and bottom of piece A, adding only 1/32" additional height to this measurement.

G. Using guage, repeat step E above. Mark and cut off the excess. (An additional 1/16" may be cut off this end, in order to make a better fit, if desired.)

H. Cut out the tab and fold along all score lines.

IV. A. Take piece B. Center guage on piece B. Mark both top and bottom and score.

B. Using height measurement on guage, mark top and bottom and score. (Do not add the additional 1/16" onto this measurement. Score.)
C. Fold all score lines.

V. Check to make sure piece A and piece B fit the book. Round corners. Trim and round tab.

VI. A. Position piece A and piece B together. Piece A is on the outside.

B. Measure position for tab slot.
   1. If book height is less than 3/4", the tab slot will be on the side of the folder, approximately 1" from edge, 1 1/4" long, 1/16" wide.
   2. If book height is 3/4" or more, the tab slot may either be on the side or on the corner.

C. Paste piece A and piece B together, but if slot is on the side, do not paste around the area of the slot.

D. Press under weight.
TIPPING PAGES INTO BOUND VOLUMES

MATERIALS:

1. paper cutter
2. glue: polyvinyl acetate adhesive (PVA)
3. Japanese paper suitable for cutting into strips [Sekishu, Kizukishi, Goyu]
4. waste paper
5. waxed paper
6. unbleached linen thread or heavy carpet thread
7. sewing needle
8. small glue brush [½" to 1½"]
9. scalpel and blades or x-acto knife
10. ruler
11. bone folder
12. scissors

Tip-ins are loose pages or groups of pages that must be inserted into volumes. Often they are errata slips, replacements for misprinted pages, an index or table of contents, or photocopied replacements for pages missing or torn or cut out of books. It is important that photocopied replacement pages have inner margins of at least 3/8 inch; if not, they will have to be recopied or guarded with a strip of Japanese paper. If replacement pages are copied on both sides, the text material should line up.

Single sheets are easily tipped-in; however, judgement must be used when tipping-in a number of pages. If the inserted material is too thick, it will put strain on the binding and damage its structure. Materials too thick to be inserted should be rebound with the book or the entire item replaced. In some cases, it may be appropriate to bind the material separately and shelf it next to the book.

PROCEDURE FOR TIPPING IN SINGLE SHEETS

1. Determine if the textual material will fit into the book. If not, the sheet will have to be recopied or reduced to fit.
2. Place a ruler 1/4 inch in from the inside margin and crease the sheet upward against the ruler with a bone folder.
If the margin of the sheet is less than 3/8 inch or if the inner margin of the book is less than 1/4 inch, see procedure for guarding below.

3] Place the fold of the hinge into the inner margin of the book and mark the sheet for trimming on the top, bottom, and side.

4] Trim the sheet using a paper cutter or a ruler and scalpel. A piece of cardboard can be used as a cutting surface to protect the work table.

5] Place the creased hinge between two sheets of waste paper so that only the creased area is exposed for gluing.

6] Glue the hinge with PVA. [Too much glue is not desirable and will stick pages together or wrinkle the sheet.]

7] Position the folded edge of the glued hinge as far into the book’s inner margin as possible.

8] Using a finger or the bone folder, rub the hinge to adhere it to the page.

9] Place waxed paper into the inner margin on either side of the tip-in to protect adjacent sheets from moisture/excess glue while drying.

PROCEDURE FOR GUARDING SINGLE SHEETS FOR TIP-INS:

1] Place the sheet to be tipped-in into the book and mark for trimming (if necessary) at the top and bottom. Use this procedure also for single folded sheets.


If the inner margin of the book is so narrow that the hinge of the tip-in will be over text, use the thinner Japanese paper [Kizukishi].

3] Place the tip-in sheet between waste sheets with approximately 1/8 inch of the inner margin showing. Glue the edge of the sheet with PVA. Remove the waste strips immediately and throw them away.

4] Place the edge of the Japanese paper strip over the glued area and rub with the fingers or a bone folder to secure the attachment. Place the glued hinge between waxed paper and under a flat board and light weight to dry.
5] Trim the excess of the Japanese paper strip off the top and bottom and proceed to Step 2 of TIPPING-IN SINGLE SHEETS above.

PROCEDURE FOR TIPPING-IN SEVERAL SHEETS:

1] If the inner margins of the replacement pages are at least 3/8 inch wide, place a ruler 1/4 inch in from the inner margin of the first sheet, crease the sheet upward against the ruler, and fold. If the inner margins are less than 3/8 inch, the sheets should be recopied with wider margins or a guard of Japanese paper added [see above].

2] Place the sheets one on top of another with 1/8 inch of inner margin showing. The folded edge of the first sheet should be turned under.

3] Glue the exposed edges with PVA, separate the sheets, and lay them one on top of another with the inner margins lined up exactly.

4] Proceed to Step 3 of TIPPING-IN SINGLE SHEETS above.

PROCEDURE FOR TIPPING-IN SEVERAL FOLDED SHEETS:

1] Remove the staples. Place the folded sheets into the book and mark for trimming [if necessary] on the top, bottom, and side.

2] Trim the sheets using a paper cutter or a ruler and scalpel.


4] Fold the hinge strip in half and place it around the folded edge of the sheets.

5] Thread the needle with a piece of thread 2½ times as long as the sheets. Starting in the inside and center of the folded sheets, sew the hinge strip to the sheets. Use 3 holes for short items and 5 holes for long items. End with a square knot.
6] Using waste strips to protect the item, glue-up the hinge strip and place the item as far back into the book as possible.  
7] Smooth the glued hinge with the fingers or a bone folder and place a piece of waxed paper on either side of the tip-in to protect adjacent sheets from moisture/excess glue while drying.
Instructions for making Book Wrappers

1. Generally, the material used for book wrappers is acid-free map folder stock, .010 thickness. For larger and heavier books, .020 thickness can be used.

2. Cut one piece of paper with these dimensions:
   - width = width of book (at widest point)
   - length = 3x length of book + 2x thickness of book or, length can be left long and trimmed down later.

3. Cut another piece of paper with these dimensions:
   - width = length of book (at longest point)
   - length = 3x width of book + 2x thickness of book or, again length can be left long and trimmed down later.


5. Remove book and go over creases with bone folder. Trim off excess paper, if any.


7. Remove book and go over creases on second piece of paper with bone folder. Trim off excess paper, if any.

8. Glue the two pieces of paper together with PVA. First piece (vertical) is glued on top of second piece (horizontal). It is not necessary to glue entire surface; just a few lines adhesive is fine (see diagram C).

9. When dry, place book in center of wrapper. In pencil, mark top flap '1', bottom flap '2', spine flap '3', and foredge flap '4' (see diagram C). These numbers will later tell the user in what order to fold the flaps.

10. Use tongue pattern to trim down flap '4'. In general, tongue should be no more than 2" long.

11. Wrap flaps around book in numerical order. Make two marks on flap '3' as shown in diagram D. Unfold wrapper and cut slit in flap '3' with a knife and straightedge.

12. Use corner cutting machine (or scissors), round ALL corners, including those on tongue.

13. Again wrap flaps around book in correct order and insert tongue into slit. Wrapper is complete.
A handbook for student assistants in the conservation unit is in the process of being developed. It is not our intention to write a new manual but to gather the procedures, with modifications that meet our needs, that we use on a regular basis (generally from Jane Greenfield, Ned Kyle, and Carolyn Morrow) and consolidate them in a binder for each student. When a student joins the staff he/she will add to the binder each new procedure as it is learned. In addition, we are writing a series of "check list" of steps for each procedure that our students can follow easily and quickly without always having to refer to the detailed instructions.

The handbook is generally divided into the following categories:

1. General department information includes scheduling, filling out time sheets, pay schedules, breaks, production expectations, etc.
2. How books are made gives general information about hand bound books versus production books.
3. Care of tools, equipment and good working habits reinforces what is regularly stressed.
4. Check lists and instructions of all procedures done in-house.
5. The following departmental practices gives explanation of flags, tattle taping, keeping statistics, RUSH materials, brittle books searching, etc.
6. Appendix will have samples of materials used in the bindery (paper, cloth, board, what and when to use each), various paste recipes, etc.

**Care of Tools and Equipment**

You are responsible for your hand tools and the cleanliness of your work space. You are also expected to cooperate in keeping order and cleanliness in the department.

**Care of Hand Tools**

The following tools are yours to use while you are working in the conservation unit. They are to be kept in their container and put on your "work in progress" shelf when not being used.

- Bone folder
- 1" Brush
- Scalpel
- 4" Brush
- Ruler
- Round pastes brush
- Paring knife
- Small water color brush
- Tweezers
- Dividers
- Neat's Foot
- Sewing needles
- Erasers - Pink Pearl
- Magic Rub
- Mars Plastic

All other tools and materials are either in the gray cabinet or on the peg board above the work benches.

At the end of each day you should wash your bone folder, knife and brushes with soap and water. It is important that ALL adhesive be removed from the bristles. If adhesive build-up is not checked, the bristles become hard and the brush is impossible to use.

**Maintaining Your Work Space**

When you are finished working for the day, put the books you are working on and your hand tools on your shelf. Throw away all paper used for pasting, etc. Wipe area clean. Center the 4th sheet of binder's board with several sheets of waste paper on top so that the space is ready for the next worker.

**Department Procedures**

It is everyone's responsibility to keep the department picked up, clean and in order. The following will make the department a more pleasant and productive place to work for everyone:
Put all used waste paper and scraps of cloth in the trash container.

Respect others working by not spreading what you are working on around the department.

Put off cuts of paper and cloth back in their respective drawer or bin. Cloth pieces large enough to be used again should be rolled and put in the box next to the cloth bin. Containers on top of the map drawers are for small pieces of paper that can be used for pasting.

Be sure to remove all staples, clips from materials being cut on the board shearer or the guillotine. As a safety precaution, the blade of the board shearer should be down when not in use.

Everyone takes a weekly turn keeping the sink area clean. Check the schedule posted on the monthly calendar next to the sink for your turn.

Put weights and pressing boards on the first shelf next to the telephone after being used.

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Materials Used in Books

The materials used in books and in their repair have unique behavior patterns that affect how a book functions. You need to understand and identify these characteristics in order to make good repairs.

One of the most important characteristics you will deal with continually is the "grain" of paper and binder's board. This means that these materials fold or bend more easily in one direction than in the other. For a book to function well the pages must turn (fold over) easily. In other words, the "grain" is parallel to the spine of the book.

Three ways to find the grain of paper.

Visually. Many papers, including most Japanese tissues, have lines called "chain" lines, lighter than the rest of the paper that are about 1" apart and visible when the paper is held up to the light. The grain is always parallel to these lines.
Bending: This is perhaps the most common way to find the grain. Bend the sheet over in one direction and then in the other direction and feel the resistance. The direction with the least resistance is the direction of the grain.

Wetting: Cut a small square of the paper you want to use and lick it on one side. The paper will curl into a tube, indicating that the grain is parallel to the length of the tube.

Check the sample folder for the various kinds of papers we use.

Covering Materials

We use several kinds of material that protect the textblock as covers - binder's board, museum board and library board. Like paper, board has a "grain", however, the method for determining the grain is somewhat different.

Put the board on a flat surface and bend one edge with your thumb underneath the board and your fingers on top. Like paper, the board will bend more easily in one direction than in the other, but because of the thickness of the material the bend will not be as great.

The palm of your hands and fingers will curve with the board when bending with the grain.

When bending across the grain, your hands are forced to curl away from the board.
Cloth

Cloth cannot be said to have a grain, but it does fold more easily along the long warp threads parallel to the length of the roll. Also look for the selvage edge. It is also in the direction of the warp threads.

The cloth used in a binding should be cut so that the warp threads run parallel to the spine of the book.

SELVAGE

Adhesives

In the UC conservation unit we use several kinds of adhesives - PVA, paste and methyl cellulose. Each has different properties and different uses that you should be aware of.

PVA, a polyvinyl acetate emulsion, is a good all-around adhesive. It is white (or slightly cream colored). Because it has a relatively low moisture content, it dries quickly creating a flexible bond and the paper it is applied to will cockle only moderately, if at all. However, because PVA dries quickly you will not have a lot of time to complete a procedural step. Example: lift and re-align a piece of paper or cloth.

PVA can be thinned with water. The brand we use is very thick and must be thinned. Sometimes we combine it with prepared methyl cellulose (see next section).

Uses for PVA: Tighten books in their cases, Attach pockets to the inside of covers, -tip-in, attaching labels, Making a new case, All steps of spine repair and rebacking a cover, Affixing cloth to another surface, Attaching enclosure parts together.

Undiluted PVA is kept in a large tube on the shelf next to the sink. Smaller jars of diluted PVA and mixture are on the first shelf of the same unit.

Methyl Cellulose is a vegetable adhesive. It is in powdered form and must be added to cool water to make a translucent substance. It is slow drying and does not have very strong bonding qualities, therefore, it is usually mixed with PVA to make a mixture.

Mixture is 50% PVA and 50% Methyl Cellulose. It extends PVA (and paste) and gives you more time to work. See appendix for mixing instructions.

Uses for Mixture: Can be used for any of the procedures listed for PVA, except tighten books in their cases.

Paste is made with either pre-cooked wheat, rice or corn starch. Pre-cooked wheat starch is sprinkled onto water and heat until the desired consistency is reached. Uncooked starch is mixed with water and cooked to the desired consistency. Instructions for making uncooked and cooked paste.
are given by the student supervisor or a student who has already learned this procedure. Check appendix for recipes.

Paste cannot be kept for a long period because it tends to mold easily. Therefore, we add o-Phenylphenol (thymol can also be used) during the final step.

Paste dries slowly, will stretch and cockle paper, but it is easily removed with water.

Uses for paste:
- Cleaning spines of bookblocks
- Hinging in loose plates and pages
- Guarding slippage with Japanese paper
- Repairing tears with Japanese paper
- Sticking fragile paper
- Using as a paste

Working Tips

Measuring

Here are several ways to determine the distance between two points.

Measure with a ruler. This works fine if the surface is flat. If you are measuring a curved surface, i.e., the spine of a book, the ruler will slip and the measurement will be incorrect.

Mark the measurement on a strip of paper and transfer the measurement to the material.

Place the item to be measured on the material to be used and mark the measurement on the material.
BRITTLE BOOK PROCEDURE FORM

1. charge book to Conservation
2. search DRE
3. pull all relevant editions/volumes/copies & charge to Conservation
4. search OCLC (and NUC as appropriate)
5. search microform and reprint catalogs (see reverse) and list available replacements:
   1. publisher/source ____________________________ $ ____________________________ ______
      ( ) reprint
      ( ) microform
      ( ) newer edition
   2. publisher/source ____________________________ $ ____________________________ ______
      ( ) reprint
      ( ) microform
      ( ) newer edition

(for additional sources, see reverse)
6. search eg Catalog, if appropriate
7. process
   ( ) withdraw:
      discharge & route to Cataloging
   ( ) brittle but intact: tip in disclaimer & discharge
   ( ) replace with commercial copy:
      submit order card, hold book till replacement received, discharge; route both to Cataloging
      date ordered ______ received ______
   ( ) photocopy on Permalife:
      discharge; route original & photocopy to Cataloging
   ( ) microfilm at Micrographics:
      route to Micrographics for filming -
      date sent ______ returned ______
      accession Master Negative
      discharge & route original & fiche to Cataloging
      date sent ______ returned ______
      report Master Negative: date sent ______
8. file procedure form in closed file

Additional sources listed below:
9. publisher/source ____________________________ $ ____________________________ ______
   ( ) reprint
   ( ) microform
   ( ) newer edition
10. publisher/source ____________________________ $ ____________________________ ______
    ( ) reprint
    ( ) microform
    ( ) newer edition
11. publisher/source ____________________________ $ ____________________________ ______
    ( ) reprint
    ( ) microform
    ( ) newer edition

BIBLIOGRAPHIC SEARCH PROCEDURE

monographs
1. National Register of Microform Masters
2. Guide to Microforms in Print
3. Guide to Reprints
4. Books on Demand
5. International Bibliography of Reprints
6. Books in Print, British BIP

serials
7. National Register of Microform Masters
8. Guide to Microforms in Print
9. Guide to Reprints
10. Serials in Microform
11. other

newspapers
12. Newspapers in Microform
13. Newspapers on Microfilm & Special Collections
14. Guide to Microforms in Print
15. Serials in Microform
16. other

17. Additional sources listed below:
   publisher/source ____________________________ $ ____________________________ ______
   ( ) reprint
   ( ) microform
   ( ) newer edition

BEST COPY AVAILABLE
**PHOTOREPRODUCTION DECISION FORM**

Call/Order No.: __________________ Date: ______________

Author: __________________________ Title: __________________________

**ACTION REQUESTED:**
- Make: ___ neg. film ___ pos. film ___ bind
  ___ neg. fiche ___ pos. fiche ___ photocopy

**DISPOSITION:**
- Pages
  ____ Target  ____ Collation  ____ Missing

Original:
- ___ withdraw
  ___ discard
  ___ keep in location
  ___ annex
  ___ other

Negative:
- ___ withdraw
  ___ discard
  ___ fiche ___ uncat. for _______ (location)
  ___ cat.
  ___ film
  ___ Master Preservation Copy
  ___ Printing Master
  ___ Film (service copy)
  ___ ________ (other location--service copy)

Positive:
- ___ withdraw
  ___ discard
  ___ fiche ___ uncat. for _______ (location)
  ___ cat.
  ___ film (service copy)
  ___ ________ (other location)

Photocopy
- ___ bind & cat. for _______ (location)
  ___ 1 side ___ 2 sides ___ acid free
  ___ other

Selector/Initiator: ________ Fund: ________ Date: ________

**MICROFORM CHARACTERISTICS**

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<th>Negative</th>
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<tr>
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<td>cm (fiche)</td>
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<tr>
<td>Reduction ratio</td>
<td>___</td>
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<tr>
<td>Color</td>
<td>___ monochrome ___ color ___ mixture</td>
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<tr>
<td>Emulsion</td>
<td>___ silver halide ___ vesicular ___ diazo ___ other</td>
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<tr>
<td>Generation</td>
<td>___ first printing ___ master service copy ___ mixed</td>
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<tr>
<td>Base</td>
<td>___ safety</td>
<td></td>
</tr>
</tbody>
</table>

Comments/Condition:

Date Filmed: ______________

Data Supplied by: ___ Photographic Service ___ Microforms Librarian

BEST COPY AVAILABLE
### To: CONSERVATION OFFICE
From: DEPARTMENT OF SPECIAL COLLECTIONS

<table>
<thead>
<tr>
<th>Initials</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Call Number</th>
<th>Main Entry</th>
<th>Collection</th>
<th>Other (specify)</th>
<th>Please check request</th>
<th>Evaluation</th>
<th>Bindings</th>
<th>Paper Repair</th>
<th>Boards</th>
<th>Reuse</th>
<th>Bow/Housing (specify)</th>
<th>Encapsulation</th>
<th>Folding</th>
<th>Mildew</th>
<th>Insects</th>
<th>Cradle</th>
<th>Mat</th>
<th>Other (specify)</th>
<th>COMMENTS</th>
</tr>
</thead>
</table>

**MINOR REPAIR**
- minimum paper hinges
- do not detach boards
- remount old spine
- tighten hinges
- use old case
- endpapers - retain old endpapers
- new endpapers
- book - reattach super
- paper - tip-in crompton tissue repair
- spine - resize repair replace corners - resize stiffen other -

**Book Repair**
- replace spine new cloth under old new case phase box book wrapper
- tighten joints remount old spine use old case
- new endpapers reuse partial renew
- take down to be sent out leather treatment

**Special Attention**
- Minimum
- replace super do not detach bds.
- tip-in crompton tissue repair stiffen/resize corners
- other -

**CAUTION**

- BEST COPY AVAILABLE
ANNIVERSARY

Oleta Edwards celebrates 25 years with the University Libraries on February 1. Congratulations!

PRESERVATION AWARENESS MONTH

February is Preservation Awareness Month in the UMC Libraries. The Preservation Committee has planned a series of articles, posters, bookmarks, and an audio-visual presentation to raise the awareness of staff and patrons to preservation concerns. The posters, which you will see displayed throughout the Libraries, were designed especially for us by Pat Marrin, whose cartoons have also appeared in the Missourian.

The repeated audiovisual presentations scheduled for Thursday, February 21, at 10:30 in the Conference Room and Friday, February 22, at 2:00 in Library Instruction Room 1 will include a videotape on proper handling of books from Southern Illinois University and a slide-tape presentation from the Library of Congress on planning a preservation program which will be a good introduction to the Preservation Self Study we will be undertaking in October of 1985. The audio-visual program will also be made available to the branches, and another showing can be scheduled for Ellis if there is enough demand.

The Preservation Self Study scheduled for the fall of 1985 is sponsored by the Association of Research Libraries and will guide us in examining in depth the state of our collections and facilities, analyzing what needs to be done to remedy the problems, and devising ways to implement changes. The consultants who will be providing expert help will be Carolyn Harris of Columbia University who is Chair of the Preservation of Library Materials Section of the American Library Association, and Duane Webster of the Office of Management Studies of ARL.

One of the goals of the study is to increase preservation knowledge and awareness among the staff. To achieve that objective many staff members will be involved on task forces. It promises to be an exciting and challenging time for us all as we tackle one of the most serious problems confronting our libraries--that of our deteriorating collections.
DISASTER WORKSHOPS

The Preservation Department has been conducting a series of workshops on water-related disasters. Gay Walker, Head of the Preservation Department; Gisela Noack, Head, Conservation Division; and Carla Montori, Preservation Management Intern in the Preservation Department, have given the workshop to the staffs of over 20 school and department libraries, as well as to several departments in Sterling.

The presentation covers the nature of water-related emergencies, and how to be prepared for and cope with one. Special emphasis is laid on knowledge of the physical layout of the building, the organization of the collection, and the staff lines of responsibility. In order to involve as much of the staff as possible, the workshops are held in various libraries. Several books, ranging from the merely damp to the thoroughly wet, are used to demonstrate the handling of wet materials.

The Preservation Department hopes that these disaster workshops will enable staff to cope independently with minor problems; the central staffs of both the Conservation and Preservation Divisions are always available for consultation, and for assistance with larger problems.

Much of the material covered in the workshop presentation is summarized in the Yale University Library's Flood: Immediate Action Manual. This booklet sets out the basic procedure to follow in case of an emergency, and provides a good working outline for developing local disaster-prevention and recovery plans. It has been distributed to all departments for inclusion in the Library Procedures Manual (Section B-12). Extra copies are available from Molly Schubert in the Librarian's Office.

The Preservation Department will be giving workshops on other topics this spring. These include: Introduction to Preservation, Commercial Binding, Minor Repairs of Library Materials, and Brittle Books Procedures. Notification and sign-up sheets will be sent to school and department libraries. Anyone with questions about the workshops can call Carla Montori at 6-8176.

-Carla Montori,
Preservation Mgt.
Intern
CONSERVATION NEWS

A new Conservation Advisory Group has been formed to help channel advice and suggestions to the Conservation Office from other departments and branches in the University Libraries' system. At the request of the Conservation Officer, the Group is working on revising the Disaster Response Plan for the libraries. The Group, whose members are Ella Harsin, Harry Llull, Carol Rudisell, Rocky Nilan, David Rozkuska, Karin Eckelmeyer, Judy Mader-Mattimoe, Don Intersimone and Phil Leighton, as well as the Conservation office staff, have organized themselves into two working committees - disaster prevention and disaster action. When the written plan is ready it will be distributed and widely advertised. The plan will take into consideration only the contents of the libraries and will be coordinated with the disaster response planning being undertaken by Roy Stampfli which addresses people and facilities.

As part of the program to help branch libraries evaluate their conservation needs, and to try to help them meet these needs and concerns, the Conservation Office this past year has undertaken two collection surveys in branch libraries - one in Branner Earth Sciences and the other in the Cubberley Education Library. In both cases special portions of the collections were examined book by book to determine condition. Each book was slipped with the Conservation Office analysis of the treatment required by that particular volume. Suggestions were made for rehousing and/or changing environmental stresses, and a final report written outlining an organized way in which the collection could be treated.

Treatment varies from phase boxing, to leather dressing, to conservation repair and/or rebinding, either by the workshop staff or by commercial rebinding. Branner Library is now sending small numbers of material at pre-arranged times to the Conservation Workshop for treatment. Over the next few years progress will be made in that particular special collection.

In October the Conservation Office will be scheduling its branch visits for the coming year. If branch librarians are interested in consultations they may contact the Conservation Office for more information.

Sally Buchanan (Conservation Office)
"Update on Preservation" is an occasional column sponsored by the University Library Preservation Committee. Its purpose is to bring notes of interest from the fields of preservation and conservation to the attention of HUL Notes readers. Information is compiled by Doris Freitag and Ann Swartz, who welcome suggestions and queries. This article, the sixth in the series, was written by Richard Haas, Records Management Officer in the Harvard University Archives.

Records Management

The traditional Records Management Program is concerned primarily with information economy, efficiency, and conformity with law. To accomplish this, the Records Manager monitors the life cycle of records, from creation through disposition, always concerned with record proliferation, the proper disposition of obsolete records, and the legal requirements affecting records keeping. These programs have proven to be very valuable to many corporations, governmental agencies, financial institutions, and, more recently, colleges and universities.

Although some non-academic institutions have demonstrated their concern for recording their history by establishing an archives or by donating records to archival repositories, many have not. Academic institutions, on the other hand, have a far greater inherent respect for the preservation of their past, as well as concern with the more pragmatic aspects of records management. Recording the history of individual colleges and universities is best accomplished by the preservation of the small amount of institutional records considered to be historical, primary source material. To differentiate these records from those of short-term value is one of the important functions of the Records Management Program of the Harvard University Archives.

Once "official" records of permanent historical and administrative value have been identified, we actively work with the originating office through workshops, written guidelines, and personal contacts on the proper storage and preservation of records, prior to their transfer to an archival repository. This involves addressing the requirements of not only paper records, but also those products of "new technologies": film, fiche, magnetic tape, COM, disk, and photoduplication. As a part of this process, the Records Management Program intends to work closely with the University Library's Preservation Committee and the Library's preservation staff.

The goal of the Records Management Program is to assist the University in the efficient maintenance of its information resources while allowing for the complete documentation of its history. To achieve this, we must combine the traditional skills of archivists and librarians with the more pragmatic skills of the records manager, and employ both effectively.
BRITTLE BOOKS: HOW BAD IS IT?

In 1979 a survey of Yale University's library collection was undertaken to determine its condition. The study, the most comprehensive and statistically significant survey of its kind ever attempted, was supported by the National Endowment for the Humanities and took three years to complete. A random sampling of approximately 35,000 volumes, selected from every library in the Yale system, confirms what has been suspected about the challenge we face if our documentary resources are to be rescued from oblivion. The graph reproduced below should put to rest all charges that the preservation community is guilty of histrionics and idle speculation.

Keeping in mind that all materials that fall under the arch formed by the three plotted lines are too brittle to handle without risk of damaging them, this graph tells us some interesting things:

Although paper manufactured around 1600 is quite good (paper manufactured earlier is better still), the gradual introduction of various chemical and machine processes lowered its quality over the next 200 years. Thus the percentage of embrittlement is less than 10% for materials printed in the early 1600s, but as high as 40% for those printed toward the end of the eighteenth century.

1800 marks the beginning of a sharp decline in paper quality, a trend that continues into the century - one "improvement" in papermaking technology followed another. Nearly 80% of all post-1850 imprints sampled are printed on brittle paper. This high percentage increases over the next couple of decades, and doesn't drop sharply until between 1940 and 1950.

Since most post-1940s papers are of no higher quality than those that pre-date that decade, we can expect the papers that look good on the right side of the graph to exhibit a very high degree of embrittlement over time. In fact, we can expect all three plotted lines to arc higher and higher towards 100% embrittlement as our library materials continue to age. Only early papers, and the small percentage of acid-free papers that have been used since the 1970s, will remain strong and flexible, and counter this trend.

More than 70% of the sample of materials printed during the 1940s and 50s already exhibits a high degree of embrittlement. The useful shelf life of modern papers, then, is often no more than thirty to forty years.

The only sanguine feature of Yale's findings is that they are hard evidence of the importance of convincing publishers to use acid-free papers, and the urgency of committing resources to library preservation programs. (Jan Merrill-Oldham)
TO: Department and Division Heads
FROM: Carolyn Morrow, Conservation Librarian
SUBJECT: possible infestation of silverfish

A book and paper eating insect, the silverfish, has been captured on the seventh floor—presumably among material brought up from Humanities.

Please be on the lookout for these creatures, as a full-scale infestation could be very damaging and difficult to control.

Silverfish are very swift and move around mostly at night so they are difficult to detect. They are pale and segmented with long antennas and usually grow to about 1 cm in length. Silverfish do not bore tunnels in paper like "bookworms" (beetles in the larval stage) but skim the surface, creating grooves and obliterating printing. Actually, it is the sizing they are after, though they are also fond of paste on the spines and starch on the covers of books. Visit the Conservation lab if you would like to see one.

Please alert your staff and report any silverfish you see to me. Or if you see any fresh damage.

cc: Dale Cluff
    Art Logue
Preservation and Conservation: Clinic, Exhibit

Preservation and conservation are the themes of the latest Widener Library exhibit and an upcoming workshop by Allan J. Thenen, Paper Conservator. Mr. Thenen will conduct a paper repair workshop for library staff members on Thursday, 19 March, from 2-4:30 in the bindery of the Andover-Harvard Theological Library. The workshop is open to all library personnel; however, space is limited to ten participants. Those interested should leave a message for Doris Freitag, Book Conservator in the University Library, at Wadsworth House 5-3650.

The exhibit, "Keeping Harvard's Books: Preserving Information, Conserving the Artifact," originally prepared last spring by Mrs. Freitag in honor of Edwin E. Williams, is again on display in Widener Library. A review of this exhibit by Sam Ellenport of Harcourt Bindery, Inc., will appear in the March 1981 issue of Library Scene. The exhibit, says Mr. Ellenport, "remains without a doubt a tour de force of organization and presentation. . . . Unlike most of the exhibits about preservation and conservation which I have seen, this one does not depend upon the dramatic, striking examples of rarities found within a collection to attract one's attention. . . . By presenting examples of problems found in any library, and showing the means by which they may be approached and possibly solved, Ms. Freitag has created a presentation that focuses on the common problems which most users of libraries are . . . unfamiliar." Mr. Ellenport describes the exhibit in detail.

Preservation/Conservation Workshops

Doris C. Freitag, Book Conservator in the University Library, will conduct two workshops on "The Preservation and Conservation of Library Materials" for members of the University Library staff. The workshops are in two parts: a theoretical discussion, which will be held in the Pfeiffer Room at the Divinity School, and a practical demonstration, which will be held in the Conservation Bindery in the Andover-Harvard Library.

The dates for Workshop I are 13 and 20 November. Workshop II will be held on 4 and 11 December. All sessions begin at 9 a.m. and will last until approximately 1 p.m. Because space in the Bindery is limited, enrollment must be limited to ten participants in each session. Interested staff members may sign up by calling Wadsworth House, 5-3650.
Workshops being held by ICCP around the state are providing basic information on conservation and preservation problems and specific information on preventative maintenance for library collections. Demonstrations of simple conservation and book repair techniques conducted at the workshops allow participants to observe solutions that can be applied in the local library. However, participants attending workshops frequently have commented on the need for further hands-on training for an appropriate member of the staff. To meet this need, ICCP is offering an opportunity for intensive individual training, tailored to a specific library. In contrast to the workshop experience, the individual training sessions enable the trainee to acquire an artillery of basic skills and develop efficient work habits and experience in decision-making. Training is provided by ICCP staff using the facilities of Morris Library's conservation lab. During ICCP's grant period the training session is free. The participating library covers the cost of transportation to and from Carbondale, accommodations and meals. Depending on the needs of the participating library, sessions can last from one to five days. Typically, a session would include in-depth, one-to-one training in:

1] BOOK REPAIR TECHNIQUES for circulating collections, including tightening hinges, replacing torn endsheets, rebacking, mending torn headcaps and recasing detached book blocks into their original covers.

2] MAINTENANCE TECHNIQUES such as simple binding for paperbacks and pamphlets; encapsulation of flat paper materials; and paper flattening, cleaning and mending.

3] CONSERVATION TECHNIQUES for rare, unique, or local history materials, including proper storage, refurbishing, construction of custom protective boxes and portfolios, and treatment of bound leather volumes.

4] EQUIPMENT, TOOLS, AND SUPPLIES needed; prices and suppliers; setting up a workstation; cost of treatments and workflow.

Training is tailored to the needs of the specific library collection and the responsibilities of the trainee. Additional topics are covered if appropriate, such as efficient use of commercial binding services, proper exhibition mounting, or developing a brittle book replacement program.

FOR FURTHER INFORMATION AND TO SCHEDULE AN INDIVIDUAL TRAINING SESSION, CONTACT THE ILLINOIS COOPERATIVE CONSERVATION PROGRAM c/o Morris Library, Southern Illinois University, Carbondale, Illinois 62901 [618] 453-5122
Shelve books upright, not on foredge. Correctly shelved books are snug enough to stand up and support one another but loose enough to be easily removed from the shelf.

Do not remove books from the shelf by pulling on the spine with your finger. Push in the books on either side of the one you want and then remove your selection by rasping it on each side of the covering.

Avoid flip-flopping. Use a book end and keep the books tight. Standing on one board weakens the structure (especially the hinge) of the book.

Oversized books should be shelved laying on their sides, in order to prevent straining the binding.

Do not undertake any mending yourself. Do not use pressure sensitive tape or unknown adhesives -- they are extremely difficult to remove. Any items needing attention should be forwarded to Conservation Services. We have the people and supplies to do the job quickly and carefully.

Avoid pressing books down onto the photocopier. Select a copier with a plate at the side of the machine, so that the book can hang over the edge of the copier. Oversewn and brittle books are readily damaged by pressing too hard. Brittle books should not be copied whenever possible.

Do not carry a large pile of books in your arms, use a book truck to avoid damage from dropping.

Do not pile books on the floor, use a book truck, or better yet, shelving (which should be at least 4" off of the floor). Should there be even minimal water seepage or leakage, books on the floor can be quickly and seriously damaged.

Food and beverages may encourage the growth of pests and vermin, be careful where you store and consume food. Spills and crumbs may stain and damage books and paper. Keep food and beverages in designated areas and not in stacks, carrels, or work spaces.

Excessive heat (over 70°F) and light (close fluorescent fixtures or sun light) will increase the rate at which library materials deteriorate. Do not place materials over radiators or near fluorescent lights or sunlit windows.

Open stiff books carefully, do not force the boards or pages open; it may break the back of the contents and hasten its deterioration.

Basic housekeeping is important; a neat and clean work place helps to prevent accidents and reduces the deterioration of books and paper from soiling.

Conservation Services
Fall 1983
B-17-E
Phone: 4473
COLUMBIA UNIVERSITY

PROTECT our LIBRARY COLLECTIONS

Provided with the Assistance of Oeker & Trapp Library Bindery

LIBRARIES
CARE AND HANDLING OF LIBRARY MATERIALS
A User's Guide to Preserving
the Yale University Library's Research Collections

The Yale University Library is the second largest university library in the United States, with over eight million volumes. It is also one of the oldest academic libraries in the country. This collection of research materials is essential to the continuing development of the University.

We ask that you, the user of the library, assist in the effort to preserve this important research collection by taking proper care of the materials you use. Please observe the following guidelines.

Thank you.

CARE AND HANDLING

Handle books with care, especially if the paper is brittle.

A well-bound book will open flat and stay open. Many books, however, will not lie flat and need to be held open with two hands. Do not force a book open or use a heavy object to keep it open.

Others will want to use the same material. Do not fold pages or mutilate the book. Do not mark it in any way. If you find torn pages or if pages are missing, please bring it to the attention of a librarian.

Do not turn down the corner of a page to mark your place. A crease in the page is permanent; if the paper is brittle, the corner you fold over will break off. Do not use any bulky object as a place mark. Anything which prevents the book from closing properly, strains it. Use a slip of paper to mark your place.

Do not eat or drink while using library materials. Crumbs of food or spilled liquids stain pages and attract insects. Keep books clean.

Do not use paper clips or rubber bands on books. Paper clips can crimp and tear paper; rubber bands will crumple paper.

SHELVING

Pulling a book from the shelf by tugging at the top of the binding can tear the cover's spine. Instead, push the books on either side slightly back, grasp the book you want in the middle of the spine, and slide it off the shelf.

When you remove a book from the shelf, take the time to adjust the bookend. Books that are too loosely shelved will slump over or splay open, which will weaken or distort the binding.

Be careful when removing heavy or oversized items from the shelf. Do not bang the top or corners of the cover on the shelf.

PHOTOCOPYING

Photocopying pages of a book can put great stress on its binding. The problem of obtaining a clear image is made worse when books are published with narrow inner margins or when rebinding has reduced that margin even further.

Do not force a book open or mash it flat to photocopy facing pages. Many books are not flexible enough to withstand being opened 180° and will respond by cracking in half. Copy one page at a time, being careful to support the book at all times.

Place the book on the glass surface carefully so pages do not crumple. Pages accidentally crumpled may crease or break, even under light pressure. Brittle paper crumbles easily, even when handled carefully.

MICROFORMS

Microforms make up an increasingly large percentage of library collections. Give them the special care they require.

Handle microforms by the edges. Fingertips will damage the film by depositing oils on the film surface. Fingertips and scratches may obliterate the image. Remember that damage which is invisible or insignificant to the naked eye may become a major problem when the text is enlarged for reading.

If a film jams or tears during use, leave it in the microfilm reader and contact a staff member.

AT-HOME USE OF LIBRARY MATERIALS

Take care of the materials you take out of the library. Heat, sunlight, and humidity are damaging to books. Do not keep them on a window sill or near a radiator. Some materials are irreplaceable; all should be taken good care of.

REPAIR

The repair of library materials requires skill and training. Well-meant but ill-advised repairs often do more harm than good. Do not attempt any repair yourself. Please refer all material in need of repair to a librarian.

Yale University Library
Preservation Department
1984

BEST COPY AVAILABLE
Save a Book
Help preserve the collection for future users.

1. Handle fragile materials with special care.
2. Remove books from the shelf without pulling them at the top of the spine.
3. Refrain from making notes or underlining in library books.
4. Photocopy only when necessary. Do not apply pressure to book spines when copying.
5. Observe library restrictions on food and drink.
6. Report damage so it can be repaired.

UNIVERSITY OF MICHIGAN LIBRARIES

STANFORD UNIVERSITY LIBRARIES
are committed to the CONSERVATION of LIBRARY MATERIALS

Please Help By:

1. Handling our many materials with care.
2. Removing books from shelves without pulling them at the top of the spine.
3. Abstaining from food and drink while using library material.
4. Abstaining from the use of paper clips and marking pens on books.
5. Photocopying, if necessary, without pressing bound material flat.
6. Reporting damage so it can be repaired.

UNM PRESERVATION COMMITTEE, 1985.

DANGER

- highlighting
- food and drink
- mutilation
- dogears

will ruin our books.
Keep them in good shape for the next reader.

Thank you.

The General Libraries
University of Texas/Austin

FRAGILE
Bitte behandeln Sie bitte diese Bücher mit großer Vorsicht.

PLEASE HANDLE WITH CARE
Bitte behandeln Sie bitte diese Bücher mit großer Vorsicht.

PLEASE DO NOT REMOVE THIS CARD
This slip serves as information for the Office of the General Libraries.

BEST COPY AVAILABLE

78 123
ART & DESIGN LIBRARY

FOR THE PRESERVATION OF THE MATERIAL, PLEASE:

1. Use only pencils for taking notes and/or taking sketches. Do not use ink of any kind.
2. Do not make tracings of any of the illustrations or pictorial material.
3. Keep all material either flat on the table or well supported. You are requested to sit at one of the tables in the Art & Design Library reading room, not at one of the small study carrels.
4. Return all materials to the Art & Design Library service desk before you leave. If you wish to use the same material later the same day, inform the service desk attendant, who will keep the items at the desk for you.

PHOTOCOPYING: Material may be Xeroxed only at the discretion of the Art & Design Library. If a staff member feels there is any chance of damage, photoduplication will not be possible.

The service desk attendant will fill out the necessary form for copying "Restricted" material. A staff member will take your order to the copy center on the first floor where you will pay 50 cents per copy. (You should allow several hours between placing your order and going to the copy center to pick it up).

Library Building Hours:

<table>
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<tr>
<th>Day</th>
<th>Hours</th>
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<tr>
<td>Mon</td>
<td>9 a.m. - 10 p.m.</td>
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<td>Tues</td>
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<td>Wed</td>
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<tr>
<td>Fri</td>
<td>9 a.m. - 10 p.m.</td>
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</tbody>
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These hours apply only to the academic year. Please call 400-1000 for approximate hours on building days and 400-1200 for the hour during the weekend.

Books and periodicals are irreplaceable and cannot be replaced.

Thank you for helping us preserve your research collections.

Eating, Drinking, Smoking, Talking

Please observe the rules of courtesy to others and obey the rules as posted. You are not to eat, drink, smoke, or talk in study areas. The following areas have been designated for eating and drinking: 24-Hour Study Room, Student Union Rooms, and Study Carrels.

Eating and drinking in a 24 hour Study Room is not permitted. Smoking in a group study room is not permitted. Eating or talking in a 24 hour Study Room is not permitted.

The have been designated for eating and drinking in a 24 hour Study Room.

Ask us:

<ASK US>

If you have a question about the library, please see a staff member.

Best Copy Available

In the interest of preserving research materials, please:

1. Use only pencils for taking notes and/or taking sketches. Do not use ink of any kind.
2. Do not make tracings of any of the illustrations or pictorial material.
3. Keep all material either flat on the table or well supported. You are requested to sit at one of the tables in the Art & Design Library reading room, not at one of the small study carrels.
4. Return all materials to the Art & Design Library service desk before you leave. If you wish to use the same material later the same day, inform the service desk attendant, who will keep the items at the desk for you.
5. Return all materials to the Art & Design Library service desk before you leave. If you wish to use the same material later the same day, inform the service desk attendant, who will keep the items at the desk for you.

Placing materials on the desk will not be permitted. Treat all library materials as if they were your own. We cannot replace damaged materials.

Eating, drinking, smoking, talking, and disruptive activity in the library will not be permitted.

The best copy available is a 24-hour copy room located in the library. Please see a staff member for assistance.

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Eating, Drinking, Smoking, Talking

Please observe the rules of courtesy to others and obey the rules as posted. You are not to eat, drink, smoke, or talk in study areas. The following areas have been designated for eating and drinking: 24-Hour Study Room, Student Union Rooms, and Study Carrels.

Eating and drinking in a 24 hour Study Room is not permitted. Smoking in a group study room is not permitted. Eating or talking in a 24 hour Study Room is not permitted.

The have been designated for eating and drinking in a 24 hour Study Room.

Ask us:

<ASK US>

If you have a question about the library, please see a staff member.

Best Copy Available

In the interest of preserving research materials, please:

1. Use only pencils for taking notes and/or taking sketches. Do not use ink of any kind.
2. Do not make tracings of any of the illustrations or pictorial material.
3. Keep all material either flat on the table or well supported. You are requested to sit at one of the tables in the Art & Design Library reading room, not at one of the small study carrels.
4. Return all materials to the Art & Design Library service desk before you leave. If you wish to use the same material later the same day, inform the service desk attendant, who will keep the items at the desk for you.
5. Return all materials to the Art & Design Library service desk before you leave. If you wish to use the same material later the same day, inform the service desk attendant, who will keep the items at the desk for you.

Placing materials on the desk will not be permitted. Treat all library materials as if they were your own. We cannot replace damaged materials.

Eating, drinking, smoking, talking, and disruptive activity in the library will not be permitted.

The best copy available is a 24-hour copy room located in the library. Please see a staff member for assistance.
PROTECT your books from rain by covering or wrapping them.

Water damages books and causes mold and mildew.

Help preserve our library collections, the key to the Columbia tradition.

REMOVING BOOKS FROM THE SHELF:
- Slide back those on either side of the one you want
- Grasp books in the middle of the spine
- Don’t pull from the top

A Morsel from the University of New Hampshire Library
For cookies, pies, and sandwiches
Your softened make a tasty 1n Your apple cores and crust of bread
Allow the rays to stay well fed
And in a baking of the sun
Your cake could never be dampened.
The mice which we can’t drown
From mending books make great desert
We try to clean but need your help.
To paint the time warmen out,
We’ve passed before but you ignore.
The lights we place by every door
This time we hope you’ll need our care.
For if you don’t you soon may see
That when you have your coffee cup
Your sandwich, your piece of cake
And settled with the library book
You need to pass a course you took.
You’ll open it and know you’re spoiled
(Chapter 4 has been completed)

SOME PRECAUTIONS
for patrons of
THE HOOVER INSTITUTION
ARCHIVES

To preserve the treasures of the Hoover Institution Archives for present and future generations of scholars, please observe the following simple precautions:
1. Notify a member of the staff immediately if you noticeaccidents which are crumbling or brittle.
2. Handle documents carefully when returning them to their original positions in folders and/or boxes.
3. Food and drink, in addition to attracting insects, may damage documents. These damages are not allowed in the archives.
4. Use no bookmarks or the edges of papers which the archives will provide for you. Other reagents, such as pens, pencils, and paper clips, cause considerable damage. Also, never “dog ear” paper.
5. Never mark on documents or blank pages, even with a pencil. Removal of such marks can be very harmful to paper.
6. Do not use insecticides, powders, or similar materials adjacent to archives because of the danger of insect leakage.
7. Do not place your own paper or top of a document or in a book when taking notes; the presence from your writing instrument is harmful.
8. When handling photographs or films, use the white cotton gloves which are available in the audio-visual room.

The best time to
snack or drink is
AFTER you’ve finished
reading a book

Help preserve our library collections, the key to the Columbia tradition.

CRUMBS AND SPILLS
DIRTY AND
DAMAGE BOOKS

Help preserve our library collections, the key to the Columbia tradition.

HELP!

THE M.I.T. LIBRARIES NEED YOUR HELP TO KEEP OUR MATERIAL IN GOOD CONDITION

Poems to keep in mind

BEST COPY AVAILABLE
University of Connecticut: for books on reserve

This book is extremely fragile and must be handled with care so that it does not become more damaged before the Library is able to send it to a commercial binder.

Please open and close the volume carefully, keep loose pages in order, and return to a service desk attendant rather than using a bookdrop.

Thank you for helping to preserve the University's research collections.

University of Connecticut: for books in phase boxes

This fragile volume has been placed in a custom-made box because its special features would be destroyed by commercial rebinding. Please handle it carefully and return it to the box after use, so that readers can continue to appreciate its original format.

Thank you for helping to preserve the University's research collections.

University of Connecticut: for brittle books

This book paper is highly acidic due to the methods and ingredients used in its manufacture. As a result it has become brittle with age. Please handle with care so that information will not be lost to future readers.

A long-range goal of the Library is to purchase an acid-free reprint or microform copy to replace this volume, or to reproduce it in-house on acid-free paper.

Thank you for helping to preserve the University's research collections.

University of Connecticut: for mutilated art books

A number of illustrations have been removed from this volume. Since it is impossible to replace this book, photocopies of the missing illustrations have been substituted for the original illustrations. If you need a color illustration, see other works on the artist or consult the staff of the Art & Design Library.

NOTE TO THE READER

FRAGILE

THE PAPER IN THIS VOLUME IS BRITTLE

PLEASE HANDLE WITH CARE

STANFORD:

FRAGILE

DO NOT PHOTOCOPY

This material is fragile and must be handled with care.

YALE:

This book is extremely fragile. Please handle it with care so that it will be here when you want to refer to it again.

PLEASE HELP US PRESERVE THESE COLLECTIONS

Many volumes in The Research Libraries are scarce or in fragile condition and difficult or impossible to replace. The Library requests that you open this volume and turn the pages with great care. Return it to the protective wrapper if one is present. With your help it can be given to the next reader with minimum further deterioration. Face-down copying of this volume is not permitted. Please ask a librarian to suggest alternatives.

The New York Public Library

132 BEST COPY AVAILABLE
Paper Treasures Could Be Lost to Rot

FROM SIU
CARBONDALE.

Are you a collector of antique or genealogical documents? An old family Bible, genealogical tracing, family letters, irreplaceable documents? Do you store the family Bible in a safe place? Are your genealogical documents being stored in a safe place?

There are a few things you should do to keep your family documents safe. Firstly, make sure to store them in a cool, dry place. Avoid storing them in a place where they will be exposed to direct sunlight or temperature fluctuations. Secondly, keep them away from pests such as mice, moths, and insects. Thirdly, avoid storing them in places where they may be damaged by water or humidity. Lastly, make a regular check of your documents to ensure that they are in good condition.

Preservation Tips
- Use acid-free photo-safe paper for storage.
- Keep your documents away from direct sunlight and temperature fluctuations.
- Store your documents in a cool, dry place.
- Avoid storing your documents in places where they may be damaged by water or humidity.
- Make a regular check of your documents to ensure that they are in good condition.

Problems that libraries face include improper binding, temperature control throughout the library, bookworm damage, and human teeth and animal damage. Libraries, of course, have special problems because they have so many paper products to care for and must contend with constant handling and mistreatment by some borrowers.

Problems that libraries face include improper binding, temperature control throughout the library, bookworm damage ("The paper and glue offer a rich feast to a variety of insects, rodents, worms, lizards, or beasts of any kind"), careless handling by borrowers ("Bending covers back too far, forcing a book open to photo-copy something, bending page corners, putting pens, pencils and rules in to mark a place, making marginal notations until the page is full of graffiti"), book drops, improper shelving ("Books shouldn't lean"), and, would you believe, book biting ("Human teeth marks are not uncommon"). In addition, there is intentional mutilation, like ripping out pages.

Preventive maintenance for libraries includes proper environmental controls, protective storage, good housekeeping and proper repairs. "Beyond that," says Miss Clark, "the treatment of items should be left to a professional." Persons trained in paper and book restoration who also have a sound understanding of the principles of conservation and the new combination of rosin and alum created a nasty side effect—free sulfuric acid. It resulted in papers that decomposed faster, they became more brittle, and when manufactured before the middle of the 19th century.

So what can an average person do to help prolong the life of a valuable book? Several things, according to Miss Clark: First of all, she says, "do not use pressure-sensitive or adhesive tape ("botch tape") to repair or display a valuable paper." It can be removed with a chemical solvent, but will leave brown stains which are not removable. Valuable materials should also be protected from extreme temperature, humidity, pollution and light. Studies have indicated, she notes, that at a temperature from 60 to 70 degrees and a relative humidity of 50 per cent, are optimal for book and paper storage.

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Funds asked for pilot programs

(From preceding page)
will have to move it again soon," he said. He declined to say where it is located or where it will be moved, because of security problems.

There are hundreds of filing cabinets filled with millions of clippings and files in the Oregon area. There are hundreds of thousands of original photographs. Between 1918 and 1972, the library kept a handwritten index of the newspapers.

He said the process is fast but it would take two to three weeks of work going through the material in order to get information on a specific subject. It must be arranged by subject.

All paper is deteriorating fast and that is because 1970 paper was made in a new chemical form and it was unstable. Before then it was made from rags and was much stronger.

The biggest problem is that so many newsgivers have been made, so many printed materials have been made available in the last few years. The materials are being used in our libraries.

Antonie, who is a librarian at the First National Library, said that she has a complete collection in the library of critical some areas of the country are being used. The main one is the Portland Library. He said that one of the best libraries in the world is the Portland Library. The librarians there have been working on it since 1918. They keep a handwritten index of the newspapers for each subject.

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**Turmoil tamer**

M.U.'s new vice president brought stability to Alaska

By Amanda Hayes
Missourian staff writer

The University's recently appointed vice president, Jay Barton, has been known in Alaska as the revival who brought stability to a troubled university.

Barton was the University of Alaska system's third president in three years, assuming his position at a time when the university had fiscal difficulties and was in conflict with the state over management of the university's lands.

Barton, a University of Missouri graduate, was president of the University of Alaska statewide system from 1978 to 1981.

Barton also assumed the position, be

**State unemployment increase attributed to seasonal factors**

JEFFERSON CITY (UPI) - Missouri's unemployment rate in January was 7.9 percent of the state's workforce, an increase of almost a full percentage point over the 7 percent rate in December, labor officials said Friday.

Paula Lindley, director of the Missouri Department of Labor and Industrial Relations, said the January increase was not unusual and was attributed to "seasonal factors.

"January and February traditionally are the year's economic low points because of seasonal layoffs, but the January increase appears to be smaller than usual," said Lindley.

"The good news this winter is that the Unemployment rate in Missouri in January 1981 increased to 7.9 percent, not as high as the 8.2 percent rate in January 1980. However, the increase is still significant.

In January, the state's unemployment rate may be higher than expected due to seasonal factors. The rate is expected to increase further in February and March as the weather improves and more people return to work.

The increase in unemployment is due to seasonal factors, such as holiday layoffs and the closure of ski resorts. In January, the rate was higher than expected due to the colder weather and the closure of ski resorts. In February and March, the rate is expected to increase further as the weather improves and more people return to work.

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Conservation: A New Mission for Libraries

Perceptions about the purpose, or purposes, of the library have varied greatly throughout the course of history. Originally a library was primarily a repository, or warehouse, for the literary fruits of man's imagination. Books were acquired and placed on the shelves, where many gathered dust for decades—or centuries. Then in the Nineteenth Century came the notion that providing patron access to the holdings of a library is as important as storing them. In the past fifteen or twenty years, a third function has been recognized—one implicit in the other functions described above—and that is the preservation of the library's collections for future generations of scholars.

Preservation, or conservation if you prefer, was not widely recognized as a separate discipline in the library profession until the mid-sixties, when the vulnerability and value of research collections were underscored by the damage which several natural disasters inflicted on a number of libraries. Perhaps most infamous of these catastrophes was the Florence Flood of 1966, which ravaged the collections of the Biblioteca Nazionale Centrale.

Library materials are not only threatened by acts of God, and man, but as well by frailities inherent in their own composition. Books and manuscripts, which have been produced over the past 150 years and which comprise the bulk of most research collections, are particularly susceptible to this degradation because they were printed on paper with a high acid content, a content that increases with age. The natural deterioration which occurs over time is accelerated by this high acidity and is manifest in the brown and embrittled pages which are all too familiar to both library patron and library employee.

The best preservation technique is prevention—taking good care of the collections and storing them under proper environmental conditions. When damage or significant deterioration does occur, conservation can take several forms. For a general collection, it might suffice to preserve only the intellectual content. This can be done by reproducing the information in another form through processes such as microfilming, photocopying or photography. These methods, while preserving the sense, cannot capture the spirit of the original. Much important information such as, for example, the history of the binding or printing techniques employed, will be lost. When the original artifact is as important as the information it contains, as is the case with a rare item or collection of rare items, preservation in the original form may be required. Conservation treatments may be employed to restore the item to pristine condition or to halt deterioration and lengthen useful life without restoring the original appearance, the choice being made based on aesthetic, intellectual, ethical and economic considerations.

A variety of library activities, including book repair, binding, the restoration of rare books and manuscripts, preservation microfilming and collection security, have preservation of the collections as the primary objective. Aside from large onetime purchases, annual expenditures for all conservation-related activities at The University of Texas at Austin well exceed a half million dollars.

This special issue of The General Libraries Newsletter describes some of the battles which staff at the University are waging on the conservation front. Many of the approaches are different, but the ultimate goal is the same: to ensure that the cultural, intellectual and financial investments which are our libraries will not be lost.
Library lab works to restore time-worn books

Books and valuable documents from years past are rapidly becoming an endangered species to U.S. libraries.

According to employees of the Special Collections section of Marriott Library, libraries face the problem of preserving their book collections. Harmful environmental conditions such as extremes in heat and humidity, air pollution, heavy usage and inadequate shelving accelerate the natural deterioration process. The extent of the problem is not fully known and solutions are only in their beginning stages.

Preserving an original is costly and time consuming. Marriott employees said they are few experts now available in the field.

In 1977 the library established a conservation laboratory staffed by two trained conservators. The laboratory is one of a handful of U.S. library facilities for extensive in-house restoration. With the purchase of a bookbinder, the laboratory is now equipped to handle most restoration procedures.

An example of the restoration process is exhibited with a poster-sized single sheet “Notice to Emigrants,” signed by Brigham Young as governor of the Territory of Utah, June 12, 1852. The document was given to the library as a gift from Salt Lake City's Zion's Book Store. It warns of the dangers of Indian attack to travelers enroute to California, and suggests that travelers stay in large groups, post vigilant guards and keep arms and ammunition ready at all times. It suggests that they camp away from brush or timbered places as the Indians "will most probably prove troublesome this season, unless due caution and vigilance is used in passing through this country."

When the library received the notice, it was pasted onto a sheet of poor quality, highly acidic cardboard which had caused considerable staining. The document was generally fragmented and worn. It was restored by the library's head conservator, Paul Forliger, who said he thinks it was one of the most difficult challenges he has attempted.

In the restoration process, he first separated the poster from its backing and washed out as much dirt and impurity as possible. The piece was soaked in a shallow-water bath for several hours. As pieces of the original floated free, they were lifted out of the bath with a support of polyester film, to which paper adheres. He then dried the fragments between two pieces of paper, which papermakers felt under light pressure to ensure even, flat drying. The cleaned and dried original was again immersed and soaked for several hours in a solution to deacidify it. The drying process was repeated and the poster, still in fragments, was ready for tissue mounting.

For mounting, Forliger said he first covered an acrylic sheet with a piece of white polyester cloth. The cloth was covered with a layer of rice starch paste. The backing material, long-fibered handmade Japanese tissue, was placed on the polyester and coated with paste. The fragments were then reattached, picked up on a support of polyester film with a spatula, and each fragment was firmly attached to the rice-paste-coated backing.

When the poster was assembled, the polyester film was removed and a final coating of rice paste was brushed over the surface. The piece was then left to air dry. It was lifted from the acrylic sheet, turned over and the cloth backing was peeled away.

The finished document was then ready for trimming and protective encasement. The notice was placed between two sheets of polyester film fastened together at the edges with double-faced tape. Finally, a cloth backing portfolio was built to contain the restored document.

An exhibit of paper and book restoration methods will be displayed in the library atrium throughout January. Programs and films concerning papermaking, printing, book binding and restoration will be presented in the library auditorium.

Friday the library will host an all-day conference on the preservation of archive materials for the Utah Museums Association and the Utah College Library Council. The conference is open to the public, and will be in the library auditorium.

An example of the restoration process is exhibited by this poster-sized single sheet “Notice to Emigrants,” signed by Brigham Young.
Selected from a series of silk-screen prints
AUTHOR! AUTHOR!

WRITE A BOOK,

NOT IN A BOOK
RESPECT BOOKS

It'll say volumes about you
HELP PRESERVE THE LIBRARY'S MICROFORM COLLECTION

Handle microforms as you would photographs – by the edges. Fingerprints are extremely damaging to the film.

If film jams or tears during use, leave it in the microfilm reader and contact a staff member before proceeding.

Contact a staff member if you should discover:

- film wound on a metal reel. Metal reels should not be used and can be replaced by plastic reels.
- a roll of film secured with tape or a rubber band. Acid-free paper straps are a suitable alternative.
- film which has been repaired with masking, transparent or other pressure-sensitive tape. These are harmful and can be replaced by cement or heat welds.
- torn or mutilated film. Early repair is important.
Help Preserve our Library Collections

PLEASE

Don't Smoke

Don't Eat or Drink

Don't Litter

The Key to the Columbia Tradition
In the summer of 1912, Mrs. Eleanor Elkins Widener bestowed a memorial gift to Harvard that has illuminated the hearts and minds of scholars for the past seventy years. Her son, Harry Elkins Widener, a 1907 graduate of Harvard, had been an avid bibliophile and collector. After his tragic death aboard the Titanic, Mrs. Widener sought to fulfill the stipulations of his will: his distinguished 3,000-volume collection—consisting of priceless English letters, many with remarkable bindings, illustrations, or unusual provenance—was to come to Harvard.

To honor her son, Mrs. Widener gave the College the funds needed to build a library befitting his interest in books and literature.

The gift was a timely one indeed. Gore Hall had been built to accommodate Harvard's 41,000 volume book collection in 1841, yet barely 20 years later it was full. By 1912, no space was available for Harvard's growing collections and thousands of volumes were moved to cellars and storage areas, much to the inconvenience of Harvard's students and scholars.

Mrs. Widener's generous gift thus answered one of Harvard's greatest needs while creating an enduring memorial to her son. The Harry Elkins Widener Memorial Library today houses more than 3,000,000 volumes in the humanities and social sciences. It is, perhaps more than any other Harvard building, a symbol of the quality and depth of the University's resources, and has become a monument of remembrance to scholars throughout the world.

Endowed book funds offer a unique opportunity to make a continuing, visible contribution to the Library. Book funds may be designated for scholarship in a particular field, and may serve as a memorial for a colleague, friend, or family member. Each book purchased by a fund is marked with an individually designed bookplate, selected by the donor, and thus becomes tangible evidence of the generosity and concern demonstrated for the Library by Harvard's alumni and friends.

Preservation

Because modern paper manufacturing methods increase the speed at which paper disintegrates, the preservation of materials has become a major concern. One solution is microfilming, and to date more than ten million deteriorating pages have been preserved on film. For many rare materials, a deacidification process is the only remedy. In the University Archives, for example, more than 250,000 photographs have been cleaned and placed in acid-free envelopes.

Named preservation funds may be established to support these vital activities. An added need is a special conservation center where vital preservation work can be performed.

Price Indices

Technological Advances

Computer-based equipment and programs are the best means of making collections accessible to scholars throughout the world. The Library's current goal is to make all holdings readily available throughout the University. The next step in this multi-phase program is the completion of an on-line acquisitions program for all books and periodicals. Opportunities exist at various giving levels to underwrite the purchase of computer equipment and programs for this important purpose.

BEST COPY AVAILABLE
Over half a million of them are brittle. Or torn. Or coming apart at the seams.

By the end of this decade, that number could easily double. And Cal's University Library, one of the most productive and comprehensive in the country, could see much of its important literature crumble away.

Everything from rare manuscripts to the everyday textbooks that helped make your diploma possible.

But there is hope. The library's Conservation Department is doing all it can to keep Berkeley's most valuable resources from vanishing. Last year alone they restored 80,000 volumes.

This year they hope to do better. And at the rate our books are perishing, they'll have to do better.

With your help, they can.

But the campaign to save our books is just one of many crucial programs at Cal that need assistance.

Tell us which one you'd like to support. Or give to the Chancellor's Fund, to ensure your generosity is put to work where it's needed most.

It may be just in time. Our library books are long overdue.

U.C. BERKELEY
It's not the same without you.
Conservation Workshop  
February 20 - March 27, 1985

The workshop outlined below offers members of the Library Associates an opportunity to explore the new field of library conservation with staff of the Stanford University Libraries Conservation Office and guest experts. The six weekly sessions will emphasize the proper care and handling of books, manuscripts, and photographs with techniques developed for the conservation and preservation of library and archival material.

February 20 - Introduction to Conservation/Preservation: Private, Local, and National Significance
February 27 - Protection and General Care for Materials
March 6 - Hands-on: Repair I
March 13 - Hands-on: Repair II
March 20 - Hands-on: Construction of Protective Enclosures I
March 27 - Hands-on: Construction of Protective Enclosures II  
Summary/Discussion/Questions

Sessions will be held from 3 - 5 pm in the Associates' Felton Room in Green Library West. The cost will be $30 for the six. Enrollment will be limited to 20 participants so that the workshop can have an effective hands-on component and each can receive individual time and attention. Should interest exceed the optimal enrollment, we would schedule another series in the future. Any queries about the content of the workshop may be directed to Sally Buchanan, Stanford University Conservation Officer, at 497-3970.
NEW OFFICERS
FOR FRIENDS
William C. Orr heads the slate of
officers elected at the Annual
Meeting of the Friends of the
UCont Library. Serving with the
new president for the 1984 year
are:
Officers
Vice President: Norman Stevens
Treasurer: Mary L. Begley
Recording Secretary: Doris Seeds
Corresponding Secretary: Lawrence Rains
Committee Chairpersons
Individual Memberships: Nancy Fitch
Corporate Memberships: C. Albert Rand
Publications: Gladys F. Pick
Best Wishes
Hospitality: Jean Dehler
Library Vision: David Grams
PLANNING
YOUR GIFT
By Lee Post, Director of Planned
Giving, University Foundation.
Through your membership in the
Friends of the Library, each of
you has made a gift to the Library.
In addition to contributions in cash,
there are many ways of planning
gifts that will not only benefit the
Library, but will also offer
substantial tax and personal fi-
ancial benefits to the donor.
Sustaining, trust, life insurance
policies, trusts, bequests and gifts
in kind often enable you to make a
significant contribution to the
Library at a relatively small out-
of-pocket cost.
Message from the President
William C. Orr
In 1984, its third year of exis-
tence, the Friends of the
University of Connecticut Li-
braries face new challenges. Not
least of these is the challenge to
maintain or surpass the success
of the organization's first two
years, based primarily on the
enthusiastic support of the Uni-
versity community.
A further challenge is to ex-
pand our reach and influence in
the state: to tap the good
will and support of other con-
stituents who share our interest
in the quality of the University's
libraries and the strength of their
research collections.
It is very likely that we will
meet these challenges, when
considering the group of able
people who have joined me in
serving as officers this year.
We have been inspired by seeing
how significant even modest
additions to available library
resources can be, and we invite
others to join us as Friends.
William C. Orr
MEETING MAY 10
TO LAUNCH SAVE-A-BOOK
The Friends spring meeting,
Thursday, May 10, at 3 p.m., will
launch "Save a Book." Ann Rus-
sell, the Director of the Nor-
est Document Conservation
Center in Andover, Massachusetts,
will give a talk with slides on con-
servation of library materials.
The meeting will adjourn to the
Special Collections' reading room
and the Map Library to see special
materials as used of conservation,
and to then to the repair work-
shop where the Library's preserva-
tion staff works.
Jan Merrill Odland, the Library's
conservation officer, reports:
Selected materials will be
sent to the Document Conser-
vation Center for analysis and all
needed services, The
Friends are fortunate to have
the Document Conservation
Center's services so readily avail-
able. Unfortunately, although
the Library houses many rare and
valuable books, maps, and docu-
ments that are in need of profes-
sional conservation treatment,
we have been unable to afford the
Center's services.
BARNETT
BENEFICENCE
James and Esther Barnett, who
had previously enabled the purchase
of two greatly desired items on the
"I Wish" list, have made another
benefaction to the Friends.
These latest gifts are $1000 to be used
for acquisitions in the departments
of Special Collections and Historical
Manuscripts and Archives.
The earlier gifts were a three-
volume set of Letters of Henry
Adams and Charles Darwin's Zu-
cherg of the Voyage of HMS
Beagle.
Deepest appreciation is expressed
to the Barnett's by the Friends
in behalf of the libraries and all
those who will benefit from having
these materials available.
"Save a Book" program provides the remedy. It will
involve identification, by the Head of Special Col-
collections, the Head of the Map Library, the University
Archives, and other officers, of items in the collec-
tions that are very important and in need of
restoration. Technical materials will be sent to the
Center for analysis and an estimate of the cost of
restoration.
It is hoped that individuals or groups of donors
will then fund restoration of the items of their
choice.
Meeting continues on page 3
"Save a Book" program provides the remedy. It will
involve identification, by the Head of Special Col-
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It is hoped that individuals or groups of donors
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choice.
Conservation in the University Libraries: Binding and Conservation Department

When you envision the library of the future, do you imagine bright, well-lit rooms filled with modern equipment? Such libraries no longer need to have any light. Instead, they are kept in darkness or low-light conditions to prevent damage to the books. However, the rate of paper degradation has increased significantly over the years, and it is now more important than ever to conserve our cultural heritage.

These developments have resulted in the introduction of alternative sources of cellulose, mainly groundwood, and by the development of machinery to cheapen the production of pulp. Groundwood gave a raw material that was about 70% cellulose fibers and 30% lignin. The lignin decomposes on exposure to light, causing discoloration and embrittlement. Also, the use of chlorine to bleach colored and dirty rags weakened the fibers and often left a residue of acid. So, too, the traditional organic sizing materials were replaced by the cheaper alum and rosin sizing. Alum is an acidic salt, which in the presence of atmospheric moisture, can breakdown into aluminum hydroxide and sulfurous acid.

For the present, individual institutions are limited in the options available to them. In fact, the size and complexity of the problem and the considerable expense involved have kept a number of libraries from doing anything. The University of Cincinnati is fortunate to have a conservation facility and a commitment to preservation from the library administration.

The conservation facility is funded, in part, by a grant from the National Endowment for the Humanities. The manifold contributions of the NEH grant to the preservation of the University Library's collections can be grouped into three major areas: 1. The purchase of equipment and supplies to outfit a bindery and an testing equipment, such as a pH meter; 2. Staff training and development is encouraged through support of attendance at
national professional meetings and advanced workshops. For example, we were able to have a representative at the American Institute for Conservation annual meeting and at a Bernard Middleton workshop on the restoration of leather bindings; 3. Lastly, the Conservation unit has established a high profile within the library and the University community. Workshops and lectures are given to library staff, students and area librarians. Several exhibits have increased interest in and awareness of the work of the conservation facility and the preservation issues facing research libraries. A major exhibit of handbound books, entitled "Cover to Cover", received local television coverage.

The commitment to maintaining library materials in usable condition is translated into several functions within the conservation program of the UC Libraries. The Binding unit performs a preventative maintenance function by processing periodicals and monographs for binding by a commercial library binder. The Conservation unit performs repair and rebinding on materials from the collections that are not suitable for handling by the commercial binder because of their intrinsic value or fragility. In addition, the department monitors environmental conditions in the libraries and recommends improvements to forestall deterioration of paper and bindings. They also educate the staff and users about care and handling of library materials. We are responsible for an adequate disaster plan to insure prompt response and reduce loss of materials. Finally, the preservation component of our program involves replacement of unusable books. In this, as well as the evaluation of materials for binding, we are concerned with complex decisions. The considerations involved in deciding on treatment for a particular title include the place of the book within our collection and its relationship to the literature of the discipline, the use it has received and its present condition. In addition, some books ought to be preserved as artifacts, rather than merely preserving their contents. And, the final deterrent to success is that conservation is expensive, and funds are limited. A phased preservation program seems to be the best approach to this decidedly overwhelming job. The so-called phased approach is basically triage for library materials; that is, the critical cases have to be identified and treated first. Of course, the decision often must be to do nothing because a cost-effective option is not available. In this effort, we work closely with the subject bibliographers to help concentrate our efforts on the 'right' books.

Our goal of extending the useful life of books in the University Libraries involves a variety of diverse activities, including environmental controls, shelving and handling practices, binding, mending and repair, restoration, replacement and photoreproduction. Conservation of the UC library collections is a job for all of us.

Contributed by: Toby Heidtmann
Head, Binding and Conservation Department

Months Best preparing the spine of a book for a new cover
The Avery Archive contains over 7,000 drawings, photographs, letters, and manuscripts relating to architecture and architecture. The focus of the collection is American architecture, with a strong emphasis on New York City and its architectural history. The archive includes the drawings of Richard and Richard Meier, Asa B. Jackson, Davis, the firm of Greene and Greene, Hugh Ferriss, and Louis H. Sullivan. A survey of the archive selected drawings for conservation under the Strengthening Research Library Resources Program revealed the extent and character of Avery's conservation needs. Drawing supports had turned brown with age, and all drawings had turned out and become brittle, and sheets were separated. The initial goal was to ensure the preservation of the most valuable drawings. The most important architects were considered in order to determine a comprehensive program of conservation and storage. This has included the use of custom-made, mylar encapsulation and double-arched, matted supports for each drawing. The collection was divided into five groups, each with a specific strategy for conservation.

Myler encapsulation and other preservation techniques were extensively used on the Greene and Greene archive, a collection of over 4,500 drawings tracing the career of two brothers who were pioneers of the arts and crafts movement in California in the late nineteenth and early twentieth centuries. Over four hundred drawings were damaged, repaired, and encapsulated in mylar. The drawings were then available for study and reproduction.

During the project, standards of storage were developed that will govern the care of all of Avery's drawings. The variety of media and drawing supports, as well as the enormous range in size of the drawings, render impractical any single method of storage. As a result, drawings are stored flat in steel cabinets, rolled in tubes, matted in solander boxes, and framed. All materials in contact with the drawings are acid-free and of the highest quality. The drawings by Hugh Ferriss, a renderer who worked on Rockefeller Center, the United Nations, and Lincoln Center, presented a particularly difficult problem. There are over three hundred sheets of all sizes, many on tracing paper, and all vulnerable to damage. Matting each drawing would have consumed too much storage space and the static charge of mylar would have disturbed the charcoal surface of the drawing. The solution was to wrap them individually in custom-made glassine envelopes and store them in heavy folders.

Experience gained through the Strengthening Research Library Resources Program has provided the guidelines for continued conservation of drawings in Avery's collection. Work can now begin on the large numbers of drawings still waiting to be treated.
cleared, and new gifts, which arrive frequently, will be processed and stored with greater skill and speed. The archive, already extensively used by students and scholars, will be even more accessible to those wishing to study American architectural history. Avery will continue to expand its participation in exhibitions on a local, national, and international level. Preservationists and architects involved in restoration projects will have easier access to documents that increase the historical validity of their designs and lower the costs of achieving them. Familiarity with the conservation needs of the collection and experience in the costs and administration of a major conservation program will facilitate effective planning for the future.

East Asian Library

There are approximately one hundred East Asian collections in North America. They contain an aggregate of one and a half million Chinese titles in more than four million volumes, and represent collectively resources unparalleled outside China and Japan. The Columbia University Chinese Collection began in 1902 with one title, a gift from the Imperial Government of China, the A chu chu shu chung or "Encyclopedia Sinica," in 8,044 volumes, published in Peking in 1726. The East Asian Library Chinese Collection now contains 63,000 titles in 220,000 volumes. It is the fourth oldest and third largest academic collection of Chinese books in the nation.

The paper used for Chinese books is of two types: (1) stable, long-lasting "traditional" paper; or (2) pulp paper, which came into use in the mid-nineteenth century. There were superior and inferior grades of "traditional" paper that were used for publications running the gamut from limited fine editions to popular, cheap editions. Book contents printed on traditional paper are generally sound, but there is occasionally need for repair as the outer fascicle cover and end papers become worn and need replacement, or as the stitching of the fascicles breaks with age and the cases containing the volumes fall apart.

Pulp paper represents the greatest threat to Chinese libraries. Although fine and special editions are still being published on "traditional" paper, most monographs and periodicals published during the first half of the twentieth century are perishable. Publications of this period constitute an irreplaceable record of a civilization in transition from a feudal empire to a republic and are heavily represented in Columbia's holdings. Many of the items are not found even in China, where the considerable destruction of books—most recently during the Cultural Revolution (1966-1976) —has been such that catalogs published even as late as 1961 by the Peking National Library, may no longer represent accurately what still exists there. It is therefore imperative that Chinese books on poor quality paper be preserved.

The East Asian Library of Columbia University, since 1935, has filmed many unique items, and many others known to exist only in fragile copies. The Strengthening Research Library Resources Program supported the filming of 570,000 pages of serials, monographs, and newspapers. This exceeded the project goal of 554,000 pages, although progress was not always smooth.

Problems arose with densitometers and development equipment. Parts had to be ordered from distant places. Staff changes occurred just as operational momentum was achieved. Preservation is ideally an activity that fits into normal library operations without disrupting regular routines, but the work involves many staff members throughout the library, and as the project accelerated, the effort often dominated other activities. Original plans had to be adjusted realistically as the filming effort proceeded. Attention is now being given to the preparation of a microfilm catalog for the East Asian Library that will show the holdings available for copy or loan and also prevent duplicate filming.

The People's Republic of China lacks technological facilities for preservation, and publishers in China are bound by economic constraints, so they cannot address reprint or other preservation needs. A continuing conservation program is essential for the 20-25 percent of Chinese materials in this country jeopardized by loss through deterioration. Columbia has made significant progress in its efforts to save these materials so vital to research and Chinese studies, but there is an imminent threat to many items still awaiting treatment.
News from Princeton University

Contact: George Gager
(609) 452-9600

For Immediate Release
Received: January 24, 1984

PRINCETON, N.J. "Conserving the Library's Collections," an exhibit in the lobby of Firestone Library, is currently on view until Sunday, February 12th. Three display cases, placed outside of the Department of Rare Books and Special Collections, show information and examples of the ongoing conservation efforts at the Princeton University Library. Installed by Curator of Rare Books Steven Ferguson, the exhibition illustrates the problem of deteriorating library materials, and some of the solutions.

As shown in the central display case, the library contains many non-book items such as manuscripts, maps and works of art on paper, besides its 3.5 million books. A survey found that 42% of these items are in some state of deterioration; thus the situation for Firestone's collections is critical. To begin the arduous task of preserving these works, the library employs fourteen people in Conservation Services, largely responsible for the general research collections. In addition, Rare Books and Special Collections has a full time conservator and assistant.

The exhibit demonstrates that the most apparent solutions to deteriorating books are repair and boxing. Boxes provide a stable environment using acid-free materials to house either rare books or books beyond repair. Varieties

of boxes include a simple book wrapper, a "phase box" (so named for a book protection project in "phases" at the Library of Congress, or an elaborate box covered in cloth or leather for rare books, all constructed in-house. The library also uses commercially-produced document boxes and folders for storage.

Books suitable for actual curative treatment, as displayed, might receive anything from a simple repair on the title page, or spine repair, or a complete repair and/or rebacking. Acidity in paper is a primary cause of brittleness and deterioration, and paper can be deacidified to prolong its life. The library recently built a deacidification unit with Federal funds, which allows staff to spray paper with an alkaline solution to neutralise acid and provide a buffer to retard acid in the future. Another technique useful for preserving flat paper materials is encapsulation; where the item is literally sandwiched between two pieces of Mylar, an inert polyester film, for protection.

Conservation in the Rare Books Department, under the direction of Karl Suchberg, comprises attention to proper housing and storage for the collection, preparing items specifically for exhibition or loan, and complex treatments on works of art on paper. The Conservation Services division includes the Preservation, Prebindery, and Treatments sections, all headed by Robert Parliament. Preservation is in effect the administrative end of Conservation Services, monitoring incoming items, making decisions about appropriate treatments, or seeking alternatives such as replacement if an item is beyond repair. Prebindery processes unbound periodicals and monographs (roughly 59,000 per annum) en route to the commercial bindery and reviews the items for quality as they return. Treatments includes Book Repair, where
books are reviewed and assigned appropriate curative techniques for repair.

Conservation in the library requires a tremendous effort, both in the
knowledge and expertise of its staff and the proper equipment and funding to
carry out these programs. To this end, an endowed fund has been established
which seeks contributions to ensure the continuance and expansion of the
library's conservation efforts. With hundreds of thousands of books
deteriorating, early action by the library is essential.
NEW PRESERVATION EXHIBIT

BOOKS MISSING IN ACTION is a get-tough exhibit which states the problem: growing mutilation and theft of books, leading to high costs of replacement and repair, as well as general frustration and lengthy delays for students.

Example—an art book opened to reveal excised color plates is labelled:

- Studying art? History? Classics? If you want to study Greek and Byzantine icons, this would have been a good source for you, but someone sliced out 20 pages of pictures. Oh, we'll replace them—with black and white photocopies.

Example—a blank space, with the following label:

- Interested in computer science? Who isn't? We were going to show a nice new computer science book here, but we can't. Someone stole it. Since a lot of computer science materials are published in small quantities, we probably won't be able to replace it.

Information about possible penalties is given. ("Book theft is a crime.")

Example—three pages torn from a journal, with label:

- The person who tore these pages out was dealt with by the Dean of Students Office. Academic Probation is an option here.

Example—a photocopy of an article labelled:

- The person who tried to steal this article (and several others) was arrested.

The action recommended: The display asks students to report observed theft and book abuse and to bring mutilated books to the attention of the circulation staff.
CONSERVATION EXHIBIT ON DISPLAY

A small exhibit has been mounted in the display case next to the PCL Information Desk. Entitled "Books Endangered: Neglect, Carelessness, and Indifference," the exhibit shows the damage that can occur to library materials when they are improperly handled by readers. Examples of this bad handling are the use of paperclips and "dogearing" to mark one's place in a volume, eating and drinking around books, applying excessive pressure to a volume's spine when photocopying, mutilation by cutting out illustrations, highlighting or underlining passages in a library-owned book. The exhibit also emphasizes the cost that accrues to the library, as well as the negative effect this cost has on collection development, when these items have to be repaired or replaced.

This is the first in a series of displays on conservation topics that will be mounted in the next to the PCL Information Desk case. The next one will appear in about two weeks. Because all of these exhibits will be small, they are highly appropriate for display in other campus libraries. Please contact me if you would like to mount any or all of them in your unit.

--Mark E. Cain
EXHIBITION

OVERVIEW: Cases 1-2

The longevity of books is determined by their component materials, their storage environment, and the people who use them. It has been said that "everything in library collections is deteriorating today, was deteriorating yesterday, and will continue to deteriorate tomorrow although we ought to retard the process."*

Each volume has its own life span as seen in the comparison of the 1743 Works of Socrates and the 1942 publication of The Devil's Dictionary. After 237 years the paper in the former is still strong, durable and amazingly white, while after only 39 years the latter must be discarded because its paper has become embrittled and crumbles when touched.

These introductory cases show the various problems libraries face every day. Further discussion of these problems and their solutions will be presented in subsequent cases.

Examples: Brittle paper
Acid migration
Foxing
Red rot, the chemical decay of leather
Light damage
Water damage (staining, mold and cockling)
Damaging binding structure
Oversewing
Mutilation

INHERENT VICE: Cases 3-4

Inherent vice, meaning the innate faults of both materials and binding structure, when combined with poor environmental conditions and poor handling results in a rapid escalation of deterioration.

In these cases some of the problems of poor materials and structure outlined in the introduction, with some comparative examples of good materials and good structure, are shown.


Environment: Case 5

Extremes in temperature and humidity, as well as exposure to ultraviolet light, shorten the life of books. Environmental conditions can be controlled with the installation of such aids as air conditioning systems, filters, and humidifiers. The quality of conditions in library stacks can be determined with the help of recording and measuring instruments. Their records provide tangible evidence of the need for environmental controls, or, if they exist, of the degree of their effectiveness in maintaining good, stable conditions.


Equipment: Cases 5-6

The craft of hand bookbinding has been practiced for centuries. Many efficient and durable methods of attaching leaves together and fastening protective covers to them have been developed. However, the equipment and tools used by present day hand binders do not vary greatly from those used centuries ago.

Examples: Lying press, Standing press (photograph), Sewing frame, Backing press (photograph), Board shears (photograph), Bone folder, Knives, Straight-edge and triangles, Brushes, Decorating tools, Gold and colored foil, Marbled paper, Leather.

Paper Treatment: Case 7

Paper presents the most difficult problem with which libraries must deal. In all its many uses for books, maps, prints, manuscript materials and more, it arrives at the Conservation Department with a great variety of problems. It may be dirty, embrittled, torn, wrinkled, stained, molded, worm-eaten -- any or all of these in combination. In paper treatment as in all other areas of conservation, the cardinal rules, reversibility and using the minimum possible treatment to achieve the desired result, apply.

The first step in paper conservation is to remove as much dirt as possible by surface cleaning. If by any chance active mold is part of the problem, the paper must be fumigated before surface cleaning is begun. Next, individual problems such as flattening, removal of pressure-sensitive tape, cardboard backings, or unusual spots are corrected. Unfortunately there is no known pressure-sensitive tape that is safe for use on rare materials.

Most papers are in need of deacidification and this is the treatment most frequently performed. While deacidification will not restore paper to its original condition, it should halt further deterioration for some appreciable time. Two methods are in use in the Conservation Department -- aqueous and non-aqueous. Paper which for any reason cannot be aqueously treated can be deacidified non-aqueously by a method developed by the Library of Congress.

Recasting, particularly of molded materials, leaf casting which reconstitutes the sheet of paper, and the removal of adhesives with enzymes are
often necessary treatments.

Mending is always the last step in paper treatment and reversibility is of the first importance. The best repair techniques involve the use of long-fibered, handmade Japanese papers in combination with the purest available water-soluble adhesive. Research materials may be mended with a more quickly applied but not so easily reversible "heat-set" tissue.

The final conservation treatment for many non-book materials is encapsulation between two sheets of inert plastic. Encapsulation provides support and safer handling and storage for fragile materials, protects them from atmospheric pollution and is completely and quickly reversible with a pair of scissors. Folders made of polyester film are also provided for handling manuscripts.

Examples: dry cleaning tools: one-wipe dustcloth outline pad kneaded gum and pink Pearl erasers examples of cleaned and uncleaned paper pressure-sensitive tape partially removed from hood (photograph) rolled and flattened paper button humidifiers (photograph) texturing materials for color fastness and pH a book taken apart for washing two title pages unwashed washed, deacidified and buffered washing equipment (photograph) material suitable for non-aqueous deacidification paper mending materials: Japanese tissues heat-set tissues impregnated paper examples: leaf cutting worn-eaten book pages uncast and cast polyester film encapsulation envelopes put together with pressure-sensitive tape or sewn polyester or handling folders

ENVIRONMENT: Case 8

Heat embrittles library materials, light fades them, atmospheric pollution degrades them, and particulate matter abrades them. High relative humidity encourages the growth of mold and fungi. Pests and rodents, other causes of damage to paper and bindings, thrive in warm, humid conditions. Disasters can happen.

Good housekeeping is one of the first steps in controlling the environment. Routine dusting and vacuuming of stack areas eliminate the buildup of dirt and the proliferation of vermin. Air conditioning and filtering and ultraviolet screening effectively combat these enemies of books. Disaster plans can be made.

Some of the deleterious effects of a poor environment are illustrated in this case.

Examples: Moldy book effects of atmospheric pollution faded bookcloth and paper cover desiccated leather cockled vellum water damaged book charred book effects of light exposure some soil silica gel, a desiccant UV light filters

MUTILATION: Case 8

Mutilation of a book can make subsequent reading difficult or impossible for the next user. Although in some cases damage is accidental, it is sometimes intentional, but most often the result of a lack of knowledge and awareness. Learning the correct way to handle a book, particularly if it is fragile, will extend its useful life.

Examples: Underlining and notes written in the margins stains from ink spill stains from pressed flowers rusty paper clip stains razored pictures and articles acid migration torn headcaps broken hinge from excessive inserts photocopier mutilation undesirable tape repairs dog-eared corners dog-eaten book

RARE BOOK RESTORATION: Case 9

The Yale Library has a wealth of rare books in its many collections. Most of them are in the Beinecke Library, thought to be the largest of its kind in the world, housing 180,000 volumes in the central tower.
These books require special care and this is carried out in the Conservation Department. All forms of restoration are performed by a staff of bookbinders trained in both the technique and the history of binding. If possible, every part of an original binding is preserved, and all evidence of the later history of the book. When the original binding can no longer be used or is missing, another may be constructed to support the style of the period. Whenever possible a non-adhesive "conservation binding" is made. It permits a book to open without strain and is often used for books that are exhibited frequently. Exhibition stands designed specifically for books that will not open well are also made. Bindings of historical interest are often not restored at all, but simply boxed.

Examples:
- Rebindings
- Leather rebinding
- Cloth rebinding
- Non-adhesive bindings
- epoxy repair
- Board binding, not restored
- Exhibition stand

Options: Case 10

Books returned from circulation in seriously deteriorated condition are sent to the Conservation Department. Each title receives a thorough bibliographic search. Standard bibliographic tools are consulted to determine the availability of reprint or microfilm replacements, and the public catalog is consulted to determine what other copies and related works exist elsewhere in the collection. The shelves are then checked, and a list of any related volumes is noted, and other copies of that title are gathered. With the book in hand and aided by the bibliographic search records, the subject specialist weighs all factors, including use and the relation of the item to the collection, and makes the final decision as to the disposition of all deteriorated editions of that title.

The options used at Yale are replacement by reprint or microfilming repair by photocopier or microfilming/discard transfer, and repair. Replacement by reprint or microfilming is most often used as an alternative and one of the most economical. Replacement by microfilming or discarding commercially or in-house is often the choice for small-volume, low-use material. Many badly deteriorated volumes are photocopied in-house. The volume is taken apart and any missing parts are replaced, through interlibrary loan if necessary. The book is then photographed on acid-free bond paper and sent to a commercial binder. The subject specialist may specify retention of special plates or maps to be kept in a pocket of the copied replacement. If the item is a duplicate or of no significance to the collection, it is withdrawn and sent to the book sale. If the item is of artificial value it is offered to the Beinecke Library or other special collections.

When the condition of the paper allows, the volume may be repaired. If the textblock is intact and only the binding has deteriorated, the volume will be sent to a commercial binder with a request for "recaulk only". When the volume is unusually heavy the binder will be requested to recast the textblock flush with the spine, thus alleviating strain on the hinges. Internal repair of the spine block is not intact, it will be sent to the Conservation Department for treatment. The Conservation Department carries out the quickest, least involved repairs that are structurally sound while using all easily salvageable parts of the existing binding.

Examples:
- Deteriorated books returned from circulation
- Preservation Department activities (photograph)
- Two copies of an early twentieth century book, both embrittled
- Microfilm replacements, commercial and in-house
- Photocopy replacement with original plates in pocket
- Heavy book, text intact, recased flush with the bottom
- Heavy book needed and recased in-house, retaining part of the original cover

Three stages of typical in-house repair on lightweight books

Full restoration

SAMPLING OF DETERIORATED BOOKS: Case 11

The books in this case are from the Preservation Department and provide a graphic illustration of the challenge facing research libraries today.

PROTECTIVE COVERS: Cases 12-13

Care is taken at Yale to provide suitable protective coverings for all incoming books and pamphlets. Unbound materials that find their way into the stacks are subject to abrasion, increased damage from dirt and air pollutants, and distortion from lack of support. Journals are sent to commercial library binders as complete volumes accumulate, and are usually given an oversewn binding. This is the strongest of all library bindings, but it results in a book that does not lie open nicely. When the paper becomes brittle the leaves will tear along the stitching leaving a volume of tightly bound stubs. Oversewing requires that the binding margin be trimmed so that the spine pages are sewn together through the mar-
gin and not through the folds. Yale has arranged for special options, such as “no trim” and “sew through the fold” for items with limited margins. Books with strong paper and an intact text block are designated “secure only”. Paper monographs are often adhesive-bound and the covers are reinforced and encased in plastic. The Preservation Department oversees the commercial binding arrangements as well as the operation of the Preparation Department where the books are plated and labeled upon their return from the bindery.

Pamphlet binding has long been a problem. Many of the old commercial, high-acid binders are literally falling to pieces in the stacks. Yale now uses three types of in-house pamphlet bindings designed by the Conservation Department. Made of acid-free board and good quality bookcloth, each is designed to suit the particular pamphlet structure. Other minor repairs are carried out in the in-house bindery.

Conservation Department repairs for the general research collection are described in Option 1, Case 10. The Conservation Department also makes “special binders” or boxes to protect restorations and books of archival value which should be retained in their original bindings.

Many archival quality protective coverings for undamaged materials are now commercially available. These include acid-free envelopes, boxes and folders in a great variety of sizes.

**Pamphlets Unprotected Materials**

- Journal, overrun
- Journal, sewn through the fold
- “Russell” binding
- Commercial rebacking
- Determined pamphlet binders
- Lower tearing along the hinge of a pamphlet binder
- Conservation pamphlet binders
- Folder for unbindable material
- Pocket
- Slip-in
- Weights and bands
- Folding box
- Archival folders, envelopes, boxes

**SUGGESTED READING**


This is the classic work on hand binding.


Provides a summary of some of the possible ways in which books can be repaired so that librarians and collectors will understand the work required.


Volume one covers a broad range of topics on library conservation and restoration problems. Volume two contains an extensive bibliography on library and archival conservation.


A classic manual on the preservation of books and bindings, this book covers minor repairs and the treatment of leather bindings.


The most up-to-date survey in the field. The bibliography covers material published through the 70's.
Books in Peril

Books, a scholar's most commonly-used tools, are not usually thought of as perishable items. However, they are susceptible to damage from humidity, light, insects, poor binding, display and storage techniques and chemical imbalances in their paper, as well as wear and defacement from users. An exhibit organized by the library's preservation department, now on display on the third floor of Butler Library, identifies reasons books deteriorate and measures Columbia takes to alleviate these problems. The exhibit will remain on view until the fall semester.

Above, damage caused by lice worms in a Persian book.
SAFE EXHIBITION OF BOOKS

In order to display books safely, placing unnecessary stress on the binding structure must be avoided. Books do not always open easily, and some may have been further weakened by use. The joints, where the cover boards meet the spine, are particularly vulnerable. A solution to the problem of exhibitions is presented here in the form of book cradles, which allow the volume to be opened for viewing, yet provide the support needed to prevent damage.

HAZARDS OF DISPLAY

Unsupported books lying open and flat on display are subject to stresses which may damage the bindings. Some other problems caused by improper display techniques are seen here: the strain on a leaf which does not open fully, but is secured tightly; and the use of wide strips of polyester which not only cause glare, but are too stiff and too tightly wrapped, and are therefore cutting into the leaves.

If a book does not open fully, a cradle which supports it at an angle may be constructed.

Flat cradles such as this may be used when the title page or a leaf near the front of the book is to be displayed.

A plexiglass cradle offers solid support for the displayed item, and may be molded closely to its contours.