

**PRESERVING WASHINGTON'S COLLECTIONS:
STRATEGIES FOR THE NEW CENTURY**

"Who Controls the past controls the future. Who controls the present controls the past."
George Orwell, *Nineteen Eighty Four*, 1949.

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I. INTRODUCTION

Preservation of knowledge is key to the University of Washington's mission. (1) The University Libraries' role in furthering the preservation of knowledge is basic to its own mission. The Libraries' preservation role is emphasized in its Strategic Plan, 1999-2003, value, mission, and vision statements. Phrases such as "preserving our collections," "preserving the community memory," "preserve knowledge resources," "build, steward, and preserve our resources for present and future generations," etc. appear throughout the document. (2)

There is no assessed value for the UW Libraries collections. The UW Annual Report Balance Sheet for 1999 lists the value of library books as \$154,337,000 (3), a figure that no doubt grossly underestimates the true value of the collections. Using the basic \$55 default replacement cost for a book, the University Libraries books as of June 30, 1999 would be valued at \$234,583,690. However, this figure also underestimates the value of the book collection since the default replacement value for science books of \$85 and for bound periodicals of \$121 is not reflected in this calculation. Further this does not include the value of audio materials, documents, manuscripts, maps, microforms, photographs, and materials in a variety of other formats. Many of these items are unique and could not be replaced in their original format. For non-unique items there are no estimates of the percent still in print, but it is probable that the vast majority is no longer available. (The University of Kansas Libraries estimates that over 90% of that libraries' collections are no longer in print in their original format). (4)

Furthermore this collection continues to grow. In 1981 the book collection alone was just over four million volumes. This year we will add our six millionth volume, a 50 percent increase in less than two decades. The microform collection increased by almost the same percentage in that period and collections in other formats grew at significant rates. This growth is likely to continue for at least the near future, especially in areas where electronic publications have had limited impact, for example, international studies.

New preservation challenges are offered by electronic formats that were not in existence twenty years ago. Alexander Stille writes in the March 8, 1999 issue of the *New Yorker*, "One of the great ironies of the information age is that, while the late twentieth century will undoubtedly record more data than have been recorded at any other time in history, it will also almost certainly lose more information than has been lost in any previous era."

In brief, the University Libraries is charged with preserving an irreplaceable collection of enormous value, a collection that continues to grow and expand in size, scope, and format. We are embarking on a new era that presents the challenge of preserving information both in traditional and electronic formats.

II. WHAT IS PRESERVATION?

"Preservation is defined as the retention of materials until they are no longer useful to a particular library. Materials may be useful not only because of the text, but because of format or process of production as well...A library's decision to discard materials should be based on information content rather than on disintegration of materials beyond the point of retention." (5)

Other library functions focus on the selection and acquisition of information, providing intellectual access to that information, and enhancing access through service activities. Preservation focuses on maintaining information - those activities that contribute to extending the useful life of information in whatever format is required.

In time, all library materials will deteriorate partly due to their physical composition, but also due to external factors. Their longevity will be impacted by the environmental conditions under which they are stored and how they are processed, housed, used, and treated. Water damage, mold, fire, insects, rodents, theft, and mutilation present further challenges to the long-term retention of materials. Preservation programs employ an arsenal of tools to slow or prevent deterioration in order to retain materials until they are no longer needed to serve the mission and priorities of the institution. Preservation seeks to balance use of items with their long-term retention.

III. THE EVOLUTION OF LIBRARY PRESERVATION

Historically preservation has its roots in the development of bookbinding and the design of other enclosures intended to protect written and printed text. With the tremendous changes in publishing, book production, and book binding in the 19th century and the simultaneous growth of pollution, that was a by-product of the industrial revolution, came the gradual recognition that book collectors and libraries faced a growing challenge of how to preserve their collections.

Among the early references to the deterioration of library materials is a letter John Murray wrote in 1823 to the *Gentleman's Magazine* about "the present state of that wretched compound called paper." He noted his 1816 Bible was "crumbling, literally, into dust," a concern Murray expanded on in later publications. (6) The deterioration of leather was also a concern. In 1842 a committee was formed by the Athenaeum Club in London to address the problem of the deterioration of the Club's leather bindings (and leather furniture!).

By the last quarter of the 19th century, awareness of preservation problems was also growing among American librarians who were taking steps to preserve their collections. (7) At the dawn of the 20th century, library preservation activities in the United States focused on binding, improving book repair techniques, and the exploration of photoreproduction technologies. Many libraries had in-house binderies and in 1905 the American Library Association appointed a binding committee. The publication of Douglas Cockerell's *Bookbinding and the Care of Books* in 1901 followed by Margaret Brown's *Mending and Repair of Books* in 1910, and Harry Miller Lydenberg's *The Care and Repair of Books* in 1931 were influential in improving book repair in American libraries. In the 1930's a new preservation technique, microfilming, became available and many libraries established in-house microfilming operations, many of which focused on filming newspapers.

In the 1950's William J. Barrow at the Virginia State Library began his pioneering studies on book paper. Barrow's studies and those of others, e.g., Gordon Williams's report on the deterioration of paper in American libraries published in 1966, led to the recognition of what became known as the "brittle book problem."

In 1960, the Association of Research Libraries appointed a committee on preservation of library materials and an American Group was established within the International Institute for Conservation of Historic and Artistic Artifacts. The latter group later became the American Institute for Conservation.

The November 4, 1966 flood of the River Arno in Florence, Italy which damaged thousands of manuscripts and books from the Italian renaissance, increased awareness of the fragility of our cultural heritage. The many volunteers who flocked to Florence to help with the recovery brought together American and British bookbinders and others who became leaders in the American library preservation movement.

Although libraries had carried out preservation functions for many years, it was only with these events that a new focus on preservation emerged which led to the establishment of formal preservation programs. Paul Banks created the first such program in 1964 at the Newberry Library. In 1967 Frazier Poole was appointed the first preservation officer at the Library of Congress. The New York Public Library established a preservation program in 1972. The first program at an academic institution was at Yale University in 1971 followed by Columbia University in 1974. Many other programs were established in subsequent years. (8)

IV. DEVELOPMENT OF THE PRESERVATION MOVEMENT IN THE 1980's

"All libraries carry out preservation functions whether they have a formal preservation program or not...preservation is a library-wide responsibility which can never be completely isolated and assigned to a single organizational or budgetary unit. However, if that responsibility is to be exercised effectively, much must be done to make explicit that which has been implied, to coordinate policy formulation and decision-making as they affect preservation, and to ensure that staff whose activities have a preservation component are appropriately trained and prepared." (9)

During the 1980's many preservation programs were established and staff members in these programs and their allies led efforts, which focused attention nationally on preservation problems. Standards were developed which furthered the preservation of library and archival materials. Vendors tailored their services to meet preservation needs and developed new services. To supplement vendor services, regional conservation centers and cooperative programs were established.

A. ESTABLISHMENT OF PRESERVATION PROGRAMS

One of the achievements of the preservation movement in the 1980's and subsequent years was "to make explicit" preservation responsibilities through the establishment of formal preservation programs in many libraries, especially academic and research libraries. Eighty-three ARL libraries, for example, have Preservation Administrators, 76% of which are full time in that position. (10) Within those libraries collections care has been improved through better storage conditions, expanded treatment and reformatting programs, and preventive conservation programs. Disaster plans have been developed and education, training, and public awareness campaigns launched. The impact of routine actions on the long-term preservation of collections has been assessed and scarce resources refocused to address the many preservation problems faced by libraries.

B. ORGANIZATIONAL CONTRIBUTIONS

The preservation community has grown remarkably in the last few decades. Within ALA, a preservation discussion group, established in 1976, became a section of what is now called the Association for Library Collections & Technical Services. The Commission for Preservation and Access, later incorporated into the Council on Library and Information Resources, was established in 1986 and, among other things, commissioned studies and convened meetings on a variety of preservation-related topics as did the Association of Research Libraries. The Research Libraries Group (RLG), founded in 1974, emphasized collaboration among its members and for two decades assumed a leadership role in research library preservation, especially in preservation microfilming. In recent years RLG has shifted the emphasis of their preservation program to digital issues. Major preservation programs such as those at the Library of Congress and National Archives and Records Administration have also played an important role. All of these organizations have contributed to both preservation knowledge and preservation advocacy.

C. ADDRESSING THE BRITTLE BOOK PROBLEM

One of the great achievements of the preservation community in the latter half of the 20th century was focusing attention on the brittle book problem, the problem of books and other paper-based materials deteriorating due to residual acid in their paper. The film "Slow Fires: On the Preservation of the Human Record" produced in 1987, for example, focused national attention on this problem. A Permanent paper standard was first released in 1984 and revised in 1992 with an International standard published in 1994. Today most book papers used in developed countries meet these standards.

The National Endowment for the Humanities has lead efforts to preserve brittle books, newspapers, and serials through its microfilming programs. To date, the intellectual content of approximately 860,000 embrittled volumes and approximately fifty-eight million deteriorating newspaper pages have been filmed. (The goal of the brittle book program, begun in 1989, was to film 3,000,000 books over a period of twenty years.) Reformatting brittle materials has become an integral part of most preservation programs.

D. STANDARDS

Research has lead to establishing standards not only for paper, but also for library binding, microfilming, environmental conditions, etc. In 1990 a taskforce of the Society of American Archivists identified 150-200 standards that were related in some way to archival preservation. (11) Many additional preservation-related standards were compiled or revised in the 1990's.

The Library Binding Institute (LBI), established in 1935, has worked with librarians to develop standards for library binding and services to meet the needs of libraries. The LBI Standard for Library Binding was published in eight editions before being revised and issued as a joint ANSI/NISO/LBI Standard for Library Binding (ANSI/NISO Z39.78-2000) in 2000. It is an outstanding example of a preservation standard.

E. PRESERVATION VENDORS

Over the years library binders and LBI have worked towards producing more durable library bindings and bound volumes with improved openability. Library binding is a very competitive business and library binders are small family-owned businesses. In recent years, there have been some closings and consolidations of library binderies. Some binderies now offer conservation services as well as preservation photocopying and have entered new fields, such as edition binding, in order to maintain a viable business.

"The only organization in the U.S. devoted exclusively to providing high-quality preservation reformatting services to the library, archival, and preservation community" is Preservation Resources in Bethlehem, Pennsylvania. (12) Established in 1985 by several eastern research libraries, Preservation Resources is now part of OCLC. Their state-of-the-art laboratory now offers microfilm scanning continuous tone and color microfilming, along with more traditional microfilming services. Other microfilmmers offer their services to libraries, but most are oriented to business imaging applications. Several vendors now offer scanning services that meet library needs. Vendors of preservation supplies for binding, repair, and housing responded to and developed the market for archival quality materials.

F. COOPERATIVE PRESERVATION

Another achievement of the preservation community has been the establishment of regional preservation centers. The Northeast Document Conservation Center, established in 1974, was the first of these, many of which are supported in part by grants from the National Endowment for the Humanities. These centers provide educational materials, training, outreach services, emergency assistance and, in some cases, conservation services to their regional communities.

In addition to the training offered by the regional centers, regional preservation consortiums and library schools have also offered educational opportunities. Especially notable is the preservation and conservation program established at Columbia University in 1981 and now at the University of Texas at Austin.

Consortiums have contributed to meeting the preservation needs of their members not only through training, but cooperative projects, for example, the CIC cooperative preservation microfilming program.

G. THE GOLDEN DECADE

The 1980's, in many ways, was a golden decade for the American preservation movement. It was notable for the broad recognition of preservation problems of traditional collections and creative responses to meet those challenges. These include the establishment of formal preservation programs in most research libraries, a growth of knowledge regarding preservation, regional and national collaborations, preservation-related standards, and major preservation microfilming efforts. Programs were established to train preservation staff and vendors, and conservation centers developed to assist libraries in addressing preservation problems.

Key to the success of research library preservation programs was the commitment of the library director and/or other key administrative staff, the inclusion of binding staff and budgets in preservation programs which enabled preservation administrators to reassign resources to new initiatives and other aspects of preservation, and in most cases, membership in RLG. The latter led to many preservation collaborations and cooperative grant projects.

V. THE CHANGING ENVIRONMENT: NEW CHALLENGES AS WE ENTER THE 21ST CENTURY.

Preservation flourished in the 1980s, but several developments in the late 20th century have impacted the preservation movement and are changing its focus:

- **COLLECTIONS:**

Collections care strategies have emerged which focus on preventive preservation methods that impact large numbers of items. These include:

- Collections conservation programs
- Off-site storage libraries with “ideal” storage conditions
- Mass deacidification

- **CHANGING FORMATS:**

The proliferation of electronic media formats has necessitated new collecting and preservation strategies.

- **LONG-TERM ACCESS TO COMMERCIAL ELECTRONIC PUBLICATIONS:**

The emergence of electronic abstracting and indexing services, electronic journals, and e-books is changing the nature of library collections. Libraries are now buying access instead of acquiring ownership. Responsibility for archiving has shifted to organizations outside the library and long-term access for a library's user community is not guaranteed.

- **DIGITIZATION:**

Digitization has emerged as a new access method, and a potential preservation tool, presenting new preservation challenges both for the conservation of the materials being digitized and for long-term digital archiving. The role of preservation in digitization initiatives is still evolving.

- **FUNDING:**

Acquiring access to electronic formats has put new strains on limited library budgets and often has meant fewer resources are available for the acquisition and preservation of more traditional media. At the same time the production of materials in traditional formats continues to grow. New programs such as mass deacidification and digitization place added demands on library budgets.

A. COLLECTIONS CARE AND MASS DEACIDIFICATION

As the preservation movement has evolved, so has the concept of collections conservation, which focuses on the general or circulating collections as opposed to special or rare book conservation. Collections conservation usually includes activities such as book repair, construction of protective enclosures, pamphlet binding, and re-housing materials, but may also include maintenance activities

such as cleaning stack areas. A number of libraries have hired Collections Conservators to coordinate these activities. Some libraries have also included supervision of storage areas as part of collections care. Brown, for example, recently advertised for a Manager, Collections Storage and Care for its Preservation Department.

As part of their collections care program, several major research libraries have constructed off-site high-density storage facilities with excellent environmental conditions to house lesser used materials. One of the first opened in 1984 at Harvard University. The University of California, Cornell University, University of Minnesota, and the University of Texas at Austin are among the libraries with such facilities. Cooperative facilities are being planned in the New England and Mid-Atlantic regions. Although not all storage libraries have environmental controls, those that do can become an important component of the library's preservation strategy. Peter Waters has described the provision of good environmental conditions as "the first line of defense."

Although most early handmade papers are strong and durable, mass-produced papers manufactured from the mid-19th century to the late 20th century are usually acidic which leads to their eventual embrittlement. For many decades researchers have attempted to develop methods of mass deacidification, which would retard the embrittlement of paper by neutralizing the residual acid in these papers. The challenge of mass deacidification was to develop a safe, inexpensive and non-toxic method that would not change or damage paper, inks, or bookbindings and adhesives. Mass deacidification is now economically feasible and has added a new tool for the preservation of paper-based collections. Deacidification is a "mass treatment" that can benefit a large number of items in a collection.

The one proven mass deacidification process currently available in the United States is Preservation Technologies, L.P. (PTLP) Bookkeeper process. Bookkeeper is used by the Library of Congress and over 50 other libraries to treat books and archival materials that have acidic paper. Now that deacidification is a proven technology for extending the life of paper, libraries are incorporating deacidification into their preservation programs. From March 1996 through 1999, PTLP has deacidified over 250,000 books for the Library of Congress alone. PTLP is currently negotiating with the University of California to establish a west coast facility in the UC Bindery in Oakland.

A German firm, Zentrum für Buch-Erhaltung (ZFB), is currently exploring establishing a deacidification facility in Massachusetts. If the latter facility is established, North American libraries will have a second deacidification process from which to choose.

B. CHANGING FORMATS

Libraries have always collected materials in a wide range of formats. Our collection statistics don't reflect the variety of formats we have in our collections, let alone the complexities of these formats with their many different physical components. The intrinsic qualities of these materials impact their preservation and various formats react differently to environmental conditions.

Books, e.g., consist not only of paper, but also of ink, bindings, adhesives, sewing threads, and illustrations produced by various techniques. Sewing structures, binding techniques, and other manufacturing processes also vary. Paper-based collections in libraries include not only books, but

also manuscripts, maps, drawings, technical reports, serials, posters, playbills etc., with books and serials historically receiving the most attention from a preservation perspective.

Although libraries have been oriented historically to print-based information, most contain image and sound materials that are, in some respects, even more complex than our paper collections. For example, our collections include materials produced using many different photographic processes, which contribute to the chemical and physical complexity of our collections. To give one example, at least eleven different photoreproductive methods have been used to reproduce architectural drawings since 1842. Sound also has been recorded in many different ways, for example, 78 and LP disks, tapes, and CD's, and are equally complex. Moving images account for many additional formats that have evolved from traditional reel formats to Beta and VHS reflecting numerous changes in technology. Reformatting is often required for audio/visual formats in order to assure continuing access. However, libraries have not been as responsive in addressing preservation issues for these audio/visual materials as they have paper materials.

In the late 20th century new electronic formats, for example, computer disks, CD-ROMS, computer tapes, e-mail, computer-based learning materials, and other electronic records, have added to the complexity of materials that must be preserved. Archivists and librarians are facing new collecting and preservation challenges. Unlike many earlier formats these formats need special equipment and software to use. Migration or emulation to preserve data is necessary in a rapidly changing technical environment. Like information in other formats, not all electronic information needs to be preserved, but much has already been lost due to the lack of action. In March 2000, the National Archives and Records Administration announced collaboration with the National Science Foundation to create an Electronic Records Archives. This could contribute to solutions for the long-term retention of electronic records.

Computer-assisted techniques are increasingly being employed to produce photographs, architectural drawings, and maps. Many photographers, for example, utilize digital cameras instead of chemical photography. CAD (computer-aided design) drawings are replacing traditional architectural drawings. GIS techniques are being used to produce cartographic materials. Will we collect these new formats and, if so, how will we preserve them?

C. LONG TERM ACCESS TO COMMERCIAL ELECTRONIC PUBLICATIONS

Changes in information technology are also impacting scholarly communication. A& I services, journals and books are, in some cases, only being produced electronically and although they may be "acquired" or licensed by the Libraries, we no longer have a physical object or own the information. Archiving is the responsibility of publishers or other organizations and long-term access for a library's user community is not guaranteed. Should libraries license the ability to locally archive some electronic products? Should "duplicate" archives be maintained, as are multiple copies of hardcopy journals in libraries across the country? The Coalition of Networked Information and Council on Library and Information Resources have begun to address the problem of minimum requirements for such archival repositories. (13)

It is not the purpose of this report to address all the challenges of electronic media, but only to underline the growing complexity of addressing the long-term preservation of library collections whose very nature is being changed by the acquisition of electronic products. (14)

D. DIGITIZATION

Digital imaging is being increasingly used to provide access to library materials originally produced in traditional formats. While increasing access, the digital copy is not currently considered a true preservation copy. Many advocate a "hybrid" model of microfilming and digital imaging. Even if the hybrid model is used, what is the individual library's responsibility to preserve the original, which has an authenticity and physical evidence that the reformatted copies lack? (15)

While digitization dramatically increases access to information, digital archiving is a tremendous challenge. Although no doubt standards will emerge for digital archiving, much of the electronic media, electronic records, and digital files produced during recent years will be lost. Individual libraries have responsibility for archiving digital information that they have created. Work such as that being done at Cornell and in an OCLC/RLG project will certainly contribute to a long-term strategy for archiving digital information. (16)

The role of preservation programs in digital imaging is still evolving, but scanning is often considered an extension of preservation reformatting activities. Preservation programs at Cornell, Columbia, Harvard, Northwestern, and Yale Universities as well as at the Universities of Chicago and Michigan are among those that have been involved in digital production, research, or other aspects of digitization.

E. FUNDING

Licensing access to new electronic resources and finding dollars for new programs such as digitization have strained library budgets in an era in which library budgets have less buying power. Rising construction costs have made securing funding for facilities such as off-site storage libraries more difficult to obtain. Nationally NEH funding has focused on microfilming. NEH funding was reduced in 1996 with less funding for preservation programs. Other funding agencies have shifted their focus to digital projects.

Many research libraries have turned to private fund raising to fill the gap. A number of institutions have established preservation endowments. Brown University, for example, used a \$625,000 NEH challenge grant to raise funds to establish a \$3,200,000 preservation endowment.

F. THE CHALLENGE OF THE FUTURE

New information technologies will appear in the 21st century that will present new challenges for preservation. Some of these technologies will no doubt assist in the preservation of information produced in previous centuries. Some technologies will become obsolete because they are superseded or not economically feasible.

The current challenge is how to preserve information in both traditional and new formats for seeking "solutions to preserving digital information...does not absolve our responsibility to rescue the millions of print volumes that are turning to dust on our libraries' shelves. And it does not reduce the urgency of finding solutions to the problem of preserving films, videos, and recorded sound, recording media whose life spans are already known to be far shorter than acidic paper." (17)

As Abby Smith has said, "Preservation is the act of managing risk to the intellectual and physical heritage of a community and all members of that community have a stake in it. Risk management is

dynamic, and, in practice, preservation becomes an ever-changing assessment of value and endangerment." (18) In a rapidly changing environment, each community must assess not only its community responsibilities, but also its regional and national responsibilities.

VI. PRESERVATION AT THE UNIVERSITY OF WASHINGTON

A. PRE-1981

The library collection grew rapidly in the first 80 years of the 20th century. In 1903, the Libraries had only 15,000 volumes, but by June 30, 1981 the collection had grown to over four million volumes (4,024,258) plus large collections of archival materials, audio-visual items, maps, and microforms. The Mendery had been established by 1947 to repair books, although book repair began many years before that date. A campus bindery in the Department of Printing was established in 1962. Before that date binding was done by the State Printer in Olympia. A microfilming operation was established in the Libraries in the 1960's. In 1978, a sound restoration program was begun in the Music Library Listening Center. In 1979, an eighth shelf was added to shelving in the Suzzallo stacks due to extreme crowding. This led to fore-edging many books in the Suzzallo collection. In December 1980, a project funded by a NHPRC grant and private funding to produce prints and copy negatives from nitrate negatives in the Clark Kinsey logging photograph collection was begun. Also in 1980, the Libraries participated in the Washington Newspaper Preservation Project Planning Taskforce. This led to a statewide NEH funded project to identify and microfilm un-filmed Washington state newspapers.

B. THE 1981 ARL PRESERVATION PROJECT

During 1981 the University of Washington Libraries served as one of three test libraries for the Association of Research Libraries Preservation Study Project. The studies done by the test libraries contributed to the development of ARL's "Preservation planning program: an assisted self-study manual for libraries" prepared by Pamela W. Darling with Duane E. Webster and published by ARL's Office of Management Studies. Development of the ARL program began in 1980 and an expanded edition of the Manual was published in 1987. The intent of the program was to help research libraries develop preservation programs.

The UW project produced a background paper on preservation, reports of four Task Forces (Condition of Collections, Crisis Preparedness, Environmental Conditions, and Resources), and a final report, which incorporated work done by the Study Team and Task Forces. The Study Team's "Background Report" detailed the state of preservation in the UW Libraries at the end of 1981:

"The rapid growth of the collections in many formats during the 20th century, the heavy use of the collections and the extremely crowded conditions under which they are stored have all contributed to the need for greater attention to preservation... current preservation activities are limited and are not coordinated. Preservation awareness and expertise varies a great deal among the current library staff.

"On the positive side, the Libraries are fortunate to be located in an area where environmental conditions are not as detrimental for the preservation of library materials as they are in some other locations. There are not extremes of temperature and humidity, and air pollution and insect pests are not a major problem...The major constraint on the developing of an effective preservation program is a financial one...A specific constraint on one aspect of a preservation program is the legal requirement that binding be done through or by the State Printer...We are also fortunate that the Libraries has had no major disasters..." (19)

The report also detailed problems with fore-edging of books and the inadequate housing of many collections, e.g. the wide spread use of wood map cases and acidic archival boxes.

In the early 1980's many research libraries were establishing formal preservation programs. At the University of Washington, the ARL Preservation Project corresponded to a period of budget reductions and staff cuts. Because of this, the Project Study Team did not recommend establishing a formal program. They did, however, make 36 recommendations.

Some action was taken in the following years on at least 70% of the Study Team's recommendations. A preservation committee and a preservation collection were established, a disaster plan written, storage equipment and containers were improved, microfilm negatives were relocated to a better storage, additional security systems were obtained, vulnerable material was relocated to Special Collections, and repair and binding programs strengthened. However, written guidelines recommended in various areas weren't completed, additional collection surveys were not done, book drops were not removed or improved, materials used in the treatment or housing of library materials weren't systematically evaluated nor was a formal preservation education program established.

C. PRESERVATION LANDMARKS, 1982-2000

Although a formal preservation program wasn't established as a result of the ARL Preservation Study, some preservation functions were transferred to Special Collections in 1984 and the division was renamed the Special Collections and Preservation Division and some space was allocated for preservation in that Division's workroom when the new Allen Library opened in 1990. A full-time Preservation Administrator was appointed in October 1998 and a Preservation Research Assistant in January 1999.

A new pamphlet binding program was established in 1987 and a preservation replacement program established in 1991. Both programs have been popular with Libraries staff. Five preservation-related grant projects were successfully completed. These projects involved reformatting, conservation, digitization, and/or conservation training. Grant-funded improvements were made in the Mendery in 1981-82 and 1994. A Save-A-Book program was established in 1989. The Department of Printing discontinued binding and a new binding contract with Heckman Bindery was initiated in 1986. In 2000, the binding contract was awarded to Bridgeport National Bindery. Collection surveys were initiated beginning in 1999.

The Department of Printing discontinued microfilming in 1988 and a new microfilm contract was signed in August 1991. Microfilm negatives were inventoried, re-boxed, and moved to a more environmentally sound storage area. The opening of the Allen Library in 1990 and the renovation of Suzzallo in 1990/91 resulted in improved storage for the collections housed in the main library. Many items were re-housed using archivally sound supplies in Manuscripts, Special Collections, and University Archives (MSCUA). New map cases and microform cabinets were acquired for Maps, Microforms-Newspapers, and MSCUA. Electronic security systems were installed in Suzzallo/Allen and eight other libraries. A disaster plan was developed and some progress made in staff training and user awareness. A rainy day book bag was designed and a Preservation web page established in 1999. Many staff members participated in preservation-related staff development training. (Appendix I: "Preservation Activities, 1980-1999 by Preservation Program Components" details additional activities.)

D. CURRENT STATUS

I. Collections

As noted above, the University Libraries collects materials in a wide variety of formats. The Libraries collections have increased at a rapid rate throughout the 20th century, but especially in the past two decades when the size of the book collection alone has doubled. Book production and the production of materials in other formats, especially electronic formats, continue to grow. Scholarly communication in developing countries is still largely printed-based. Our collections have long been regionally significant and we have been regarded as the "library of last resort" for the Pacific Northwest. Many of our collections are considered nationally significant such as those in fisheries, forestry, Pacific Northwest regional history, and international studies.

Apart from random sample surveys in 1981 and in 2000, the overall condition of our collections hasn't been assessed. In 1981, books, maps, and music sound recordings were surveyed. In the 1981 book survey, values were assigned to specific conditions e.g. stitching is intact, stitching is loose, stitching is broken or needs repair, and received scores of "0", "1", or "2" respectively. Using scores based on these values, the surveys showed that about 59% of the books were judged to be in good condition. Separate criteria were developed for maps and recordings. In map survey only 20% of the maps were judged excellent or very good. About 68% of the recordings were judged to be in excellent or very good condition. The book survey was based on one developed at Stanford University.

In 2000, two random sample surveys have been done to date: one of the Suzzallo Dewey collection and the other of the East Asia Library collection. The methodology used was based on one developed by the University of Kansas. Unlike the 1981 surveys that gave books a composite score that was then used to judge a book to be good, poor, or fair, overall values weren't placed on individual books. A more complete analysis of the 2000 surveys will be done and additional surveys are planned. However, the Suzzallo Dewey survey showed that over 96% of the books had acidic paper (based on a pH pen test), over 21% had brittle paper, 26% had damaged spine, and 24% loose joints.

Additional surveys are needed both to document other portions of the book collection and other formats, but, not unexpectedly, the older portion of the book collection is printed on acidic paper that will eventually become embrittled and a significant portion of the book collection would benefit from repair.

Key to the evaluation of any collection for preservation will be the use and long-term needs of the materials in a particular format. These needs will vary by discipline. To give a few examples, there is a long-term need for music scores in hardcopy, international studies will continue to rely on hard-copy books and journals reflecting the information formats produced in developing countries, and some fields, like mathematics, will continue to need retrospective materials that may not be rapidly converted to electronic formats. In some areas, electronic access may replace traditional hardcopy formats. New technologies will be developed in the future that will no doubt impact both the long-term viability of current formats as well as the possible uses of technology to convert existing formats. In developing strategies for preserving our collections, maximizing our options will be essential.

2. Facilities

A key factor in the preservation of library and archival collection are storage facilities used to house collections and the environmental conditions in those facilities. The University Libraries stores its collections in twenty-three different buildings, many of which were not originally designed as library facilities. Our facilities problems are well documented in two recent reports. *The Facility Master Plan Update* (20) “presents a vision of a library system which occupies fewer, more consolidated locations, and includes as a cornerstone, electronic distribution of many services to the researcher’s desktop in the faculty office, the residence hall, and the home.” The *Libraries Facilities Master Plan* (21) is the report of a committee appointed by the Provost to advise him on libraries facilities. One of its thirteen recommendations is to “Affirm Libraries responsibility for preservation of unique materials in electronic and traditional formats. The UW Libraries should take a fair-share approach to its national responsibility for preservation of non-unique material.”

Crowded shelving conditions are found in a number of libraries including Art, Chemistry, Drama, East Asia, Engineering, Health Sciences, Mathematics, Music, Oak Tree storage facility, and Suzzallo/Allen Libraries. Crowding has resulting in fore-edging books in a number of libraries. This and general crowding in many facilities is detrimental to the bookbindings. An off-site shelving facility is key to the Libraries facility plan to relieve these problems and “document the need for and obtain a permanent off-campus shelving facility” is a priority strategy in the Libraries Strategic Plan. (22)

In discussions with library staff regarding preservation, staff members expressed concern about several other facilities related matters:

- a) Use of book drops in several libraries often results in damaged materials, e.g. media materials in the Undergraduate Library.
- b) Lack of UV filtering in libraries like Suzzallo/Allen and Health Sciences damages materials. Lack of environmental controls is a problem in a number of facilities, e.g. the Oak Tree storage facility and East Asia Library’s Smith 9 and 9A storage facilities. A number of other

units reported environmental problems including Health Sciences and the Tacoma campus library.

- c) Concern was also expressed about outdated heating and ventilation systems, e.g. in the Engineering Library.
- d) Dust is a problem in several facilities. Staff in Suzzallo/Allen expressed concern about dust during and after the Suzzallo renovation.
- e) Shelving needs to be braced in some libraries, e.g. Engineering and Mathematics.
- f) Water alarms should be installed in some “remote” locations such as the Mathematics storage facility and the Suzzallo subbasement.
- g) Security systems need to be installed in branch libraries that lack them. (23)
- h) Although past disasters have been minor, the Disaster Plan needs to be updated.

3. Preservation Infrastructure

Preservation staff and resources are currently dispersed in several divisions reporting to two Associate Directors. The Preservation Office and the Serials Services Division, responsible for serials binding, report to the Associate Director for Resources and Collections Management Services. (24) The Manuscripts, Special Collections, and University Archives Division responsible for the Mendery, monographs binding, the Preservation Collection, archival microfilm masters, and support for preservation replacement; the Microform and Newspaper Collection responsible for microfilming; and Suzzallo Circulation responsible for some preservation functions for the Suzzallo/Allen Collection report to the Associate Director for Research and Instructional Services. (See Appendix 2 “Current Preservation Staffing” for details of staffing.) Preservation budgets are also dispersed with most part of the Resources budget.

4. Vendors

Like most libraries, we rely on vendors for certain preservation services. Our vendors include Acme Bookbinding for preservation photocopying, Bridgeport National Bindery for library binding, Northwest Center Document Management Services for microfilming, and the University of Washington Classroom Support Services for photographic services.

5. Staff Concerns

Some of the concerns that have emerged from discussions with Libraries staff on preservation issues are the following:

- a) Preservation lacks a focus and visibility. Staffing and budgetary resources and responsibilities are dispersed. Staff members are sometimes unclear as to where to address preservation concerns.
- b) Staff members would like to develop a better understanding of preservation issues, options, possibilities, etc.
- c) Core book and serial collections are still essential to serve the students, faculty, staff, and programs of the university. The production of print literature continues to expand.

- d) Many units have serious space concerns that have a direct impact on the preservation of their collections, which underlines the need for a permanent off-campus storage facility.
- e) Many books, while not brittle, are printed on acidic paper that will eventually become embrittled. Although books from developed countries are increasingly printed on permanent paper, most books published in other countries are still printed on acidic paper. This is especially true for books and serials acquired for our international studies programs.
- f) Non-book formats: Migration of electronic media is already an issue. There is some evidence of deterioration of microforms and recordings. We have never addressed adequately issues of preservation of flat paper, for example, archival materials, maps, architectural drawings, etc.
- g) Staff members indicated a need for preservation-related guidelines in many areas including binding, physical processing of materials, photocopying of replacement pages, reformatting of newly received materials that are damaged or in poor condition, boxing, interlibrary loan, use of book trucks and book drops, supplies used to process and house materials, etc. The disaster plan needs updating and preservation replacement procedures streamlined.
- h) Our preservation program has tended to emphasize serials binding and repairing or replacing books when they are no longer usable. Other formats and overall strategies have been neglected.
- i) The Pacific Northwest lacks the resources of statewide preservation programs, preservation consortiums, regional conservation centers, and preservation services that are part of OCLC networks such as AMIGOS and SOLINET.

VII. PRESERVATION PROGRAMS

A. COMPONENTS OF A PRESERVATION PROGRAM

Consensus developed on most components of a preservation program in the 1980's. In 1991 ARL published *Preservation Program Models: A Study Project and Report* by Jan Merrill-Oldham, Carolyn Clark Morrow, and Mark Roosa, three leaders in the library preservation field. The authors listed ten components of a preservation program:

1. Preservation Administration.
2. Environmental Control.
3. Replacement and Reformatting.
4. Conservation.
5. Mass Deacidification.
6. Commercial Library Binding.
7. Shelf Preparation.
8. Stack Maintenance and Collections Improvement.
9. Emergency Preparedness.
10. Staff Training and User Awareness.

There is general consensus on these components with the possible exception of 7. *Shelf Preparation*. Although part of most of the older preservation programs, it has not always been included in more recently established programs. (24) More recently with the advent of digitization,

some libraries have included digital imaging as part of their preservation program, often as part of their reformatting program, e.g. Reformatting and Replacement Services (Michigan) or a separate Digitization Unit (Chicago) or Digital Imaging Group (Harvard). Some preservation programs have a photography lab as part of the preservation department. Individual programs have also created positions to meet special needs. For example, the University of North Carolina recently advertised for a Preservation Assessment Librarian and Emory University for a Non-Print Conservator.

Individual programs vary in terms of how the components are organized. A preservation office (1. Preservation Administration) for example, usually includes 2. *Environmental Control*, conservation assessment (under 4. *Conservation*), 9. *Emergency Preparedness*, and 10. *Staff Training and User Awareness* as well as responsibility for overall planning and management, budgets, advocacy, grant writing, contract negotiation, etc. Some programs have a binding and shelf-preparation unit or a collections care unit that includes general collections conservation treatments and collections improvement activities such as cleaning, training of shelvers, and creating protective enclosures. Mass deacidification may be part of the preservation office or grouped with other activities. The University of Maryland, for example, has a “Coordinator, Preservation Production Management” position which is responsible for binding and mass deacidification.

B. ARL STATISTICAL COMPARISONS

The Association of Research Libraries has played an active role in furthering the Preservation of research library collections through its Preservation Program (<http://www.arl.org/preserv/index.html>). Since 1988-99, ARL has published annual compilations of preservation statistics documenting the preservation activities of its member libraries. Appendix 3 provides some comparisons between the University of Washington Libraries and some of its peers.

VIII. A PRESERVATION PROGRAM FOR THE UNIVERSITY OF WASHINGTON LIBRARIES

“The present, however amazing, always looks dreary when we remember the exciting future that should be here by now.” (25)

The beginning of the 21st century is a period of transition for libraries to an increasingly electronic environment. We can’t even predict all the changes that will impact libraries in the coming decades and predictions are not always accurate. In the immediate future we do know that we must balance the continuing need to preserve deteriorating materials in traditional formats with the challenge of archiving those in electronic formats. To further the Libraries’ Strategic Plan goal to “*select, maintain, and preserve essential information resources, including the diverse and the unique, to support the missions of a premier academic research institution,*” (26) the following strategies are proposed for a Preservation Program for the University of Washington Libraries:

- **COLLECTIONS:** Document the condition of our collections and develop preventive conservation strategies that maximize our options to slow the deterioration of large portions of our collections. These strategies need to address the needs of the different formats represented in those collections, not only books and serials, but flat paper, electronic media, and digital files.

Such strategies also need to reflect the differing needs and requirements of those who use these collections.

- **FACILITIES:** Document conditions in our collection storage facilities as they impact preservation and seek to improve those conditions in order to maximize the preservation of the collections. Key to this endeavor is helping to make the case for a permanent environmentally sound off-campus storage facility.
- **DISASTER PLAN:** Revise and update the Libraries “Disaster Response Plan for Library Collections.”
- **PRESERVATION AWARENESS:** Improve visibility for preservation concerns within the Libraries and the University community. A preservation program must incorporate staff and user training and be responsive to both staff and user needs and concerns.
- **RESOURCES:** Maximize the use of the limited resources available for preservation and expand external sources of funding.
- **REGIONAL AND NATIONAL RESPONSIBILITIES:** Address our local and regional responsibilities as the largest library in the region, explore opportunities for regional or consortial cooperation, and contribute to the national preservation effort by preserving our unique resources and collections of national significance.

A. COLLECTIONS

The strategy for the collections is two-pronged: first, collecting information to make informed decisions and second, developing strategies to further the preservation of individual collections or specific formats.

1. Collection Surveys

RECOMMENDATION 1: Continue collection surveys.

Collection surveys are useful tools to document the condition of a collection and identify problems. Two surveys were completed in 2000. One survey was of the Suzzallo Dewey book collection and second of the East Asia Library book and serial collections. Additional surveys are planned. Potential surveys include surveying material returned from circulation on a given day, newly received materials, LC books, Periodicals Collection, manuscripts material, microforms, etc. Such surveys help to provide risk assessments for various collections and provide data for planning and grant proposals.

2. Selector Survey

RECOMMENDATION 2: Survey selectors to help identify collection preservation needs.

Some priority collections have been identified in meetings with Libraries staff. Some concerns are broader, for example, how to best preserve the diverse materials in East Asia’s

Smith 9 and 9A or how to address the preservation needs of Government Publications in an open-stack environment. Additional information can be gathered through selector surveys. Selectors can help identify what is most important to preserve in the collections for which they have responsibility and help to identify vulnerable items or groups of material. A survey would also contribute to revising the disaster plan by identifying priority collections for salvage in the event of a disaster. A survey can help identify collections that might be treated in potential grant projects.

3. Focus Groups

RECOMMENDATION 3: Implement some focus groups to help document preservation needs.

In the 1998 User Survey, faculty respondents identified preservation as their fourth highest priority. A total of 40% of the respondents identified preservation as a priority. Preservation was a lower priority for graduate students and undergraduates. Focus groups could help identify overall preservation concerns, specific collections that are priorities for preservation, and format needs for various user groups.

4. Mass Deacidification

RECOMMENDATION 4: Implement a mass deacidification program.

Mass deacidification is a proven preservation technology and is now economically feasible. It can stabilize acidic paper and dramatically extend the life of paper. The Suzzallo Dewey survey found that although 96% of the paper in books in the survey was acidic, approximately 80% of these books had paper that was still strong enough to benefit from deacidification. Many other research libraries have incorporated mass deacidification into their preservation programs. A pilot program would help establish procedures and feasibility.

5. Strategy for Unbound Paper

RECOMMENDATION 5: Develop a strategy for unbound paper.

Most preservation activities in the University Libraries have focused on books and serials. Unbound paper includes archival materials, architectural drawings, maps, posters, etc. Some research libraries have employed paper conservators to focus on these materials as well as the repair of book paper. This is another group of materials that would benefit from a collection survey. We might also contract with a paper conservator to help develop a strategy for unbound paper. Our strategy might also include a pilot project to deacidify selected paper collections using the Bookkeeper spray deacidification system.

6. Strategy for Audio-Visual Material

RECOMMENDATION 6: Develop a strategy for audio-visual material.

The Libraries collections of sound recordings, film, slides, photographic prints, video and audio tapes are concentrated in Curriculum Materials; Manuscripts, Special Collections and University Archives; Music Library; and the Odegaard Undergraduate Library Media Center. Although the Music Library has an active program of sound restoration, we have never systematically examined our audio-visual collections nor developed a strategy for their preservation. A first step would be to inventory these materials by format. The varied chemical composition of these materials complicates their long-term preservation and necessitates an inventory. The Music Library has a Strategic Plan unit plan to create CD ROM's of materials in the Offenbacher and Harris collections of historic 78-rpm recordings.

7. Strategy for Electronic Media and Digital Archiving

RECOMMENDATION 7: Develop a strategy for electronic media and digital archiving.

This is multi-faceted ranging from preserving electronic library files to maintaining access to commercially acquired electronic resources such as CD ROMS to archiving digital files we are creating in-house. Part of this would entail monitoring developments nationally on digital archiving. An ad hoc Electronic Records Management Advisory Group is looking at questions relating to the management of University-created electronic records, but our strategy needs to address other aspects of the preservation of electronic files.

8. Strategy for 19th Century Materials and "Medium Rare"

RECOMMENDATION 8: Develop a strategy for preserving 19th century and other "medium rare" materials.

Abby Smith in her article, "Making a Path From the 21st Century to the 19th," notes "the 19th century is marked, among other things, by remarkable technological innovations in recording media...and the invention of cheap paper that enabled inexpensive book production." (27) Many of the books were published in notable publishers' trade bindings that have become less common as the books have been rebound. Other "medium rare" books may have special illustrations or have been published in limited editions. Some of these books are rare and should be in special collections, but many are not. What to do with these materials has been the subject of RBMS and ALA preconferences and discussions in professional literature. Several libraries have established special shelving areas and use policies. In our library, 19th century periodicals have been an area of special concern.

9. Cleaning the Collections

RECOMMENDATION 9: Investigate cleaning the Suzzallo book collection.

A number of Libraries staff members have expressed concern about dust in the collections, especially the book collections. Some cleaning has been done on an ad hoc basis. With the Suzzallo renovation a good deal of dust will be generated. Consideration should be given to cleaning the shelves and vacuuming the books in the Suzzallo collection at the end of the

renovation project. Such programs have been conducted in several other libraries, e.g. Yale University currently has such a project.

See also Recommendation 21 on developing guidelines below as these recommendations impact the collections as well as questions of resources.

B. FACILITIES

The single most important thing a library can do to preserve its collections is to assure that they are stored under as ideal of environmental conditions as possible. What is ideal varies from format to format. Preservation must always be balanced with access and often ideal environmental conditions are not possible either because of user needs or due to limited resources.

10. Off-campus Shelving Facility

RECOMMENDATION 10: Contribute to documenting the need for and obtaining a permanent off-campus shelving facility.

Additional shelving space for book, archival, and other collections is badly needed and well documented. Space problems were mentioned in 14 unit meetings. A storage facility similar to those built at other universities would make a major contribution to the preservation of our collections. Such a facility also provides an opportunity to make provision for improved preservation-related facilities, e.g. a conservation laboratory or facilities, such as cold storage, that we currently lack.

11. Environmental Monitoring

RECOMMENDATION 11: Explore the use of data loggers in collections storage areas.

As part of the 1981 ARL Preservation Project, two hygrothermographs were acquired. They have been used in various areas of the Libraries since 1981 and are currently used in the Oak Tree archival storage facility. They are labor intensive to employ as is analyzing the results of the measurements. Computer-based data loggers are now available. Participating in the field trials of the Image Permanence Institute's Preservation Environment Monitors is being explored.

12. Book Drops

RECOMMENDATION 12: Survey the uses of book drops and make recommendations on their use and/or modification.

Book drops provide a convenient way for users to return library materials but also result in damage to books and other library materials (media in the case of the Odegaard Undergraduate Library). They are a source of continuing concern among library staff.

13. Electronic Security Systems

RECOMMENDATION 13: Install and upgrade electronic security systems as needed.

Strategic Plan unit action plans include plans to install security systems in branch libraries that currently lack them (Chemistry, Drama, Fisheries-Oceanography, Forest Resources, and Music). The Social Work Library security system needs to be updated. In addition to electronic security systems, other security concerns include the issuance of keys to non-library staff in the Chemistry, Mathematics, and Physics-Astronomy Libraries and the mutilation of library materials.

C. DISASTER PLAN

With the Suzzallo renovation it is especially important to have a current Disaster Response Team and Disaster Plan as experience has shown that disasters frequently occur during renovation projects.

14. Disaster Response Team.

RECOMMENDATION 14: Re-establish the Disaster Response Team.

The Disaster Response Team, which was also responsible for writing the Disaster Plan, has been inactive. Fortunately we have not had any major disasters, but the Team needs to be re-established to update the Plan.

15. Disaster Plan

RECOMMENDATION 15: Revise and Update the Disaster Plan

Although the contact list has been periodically updated and other minor changes made, the Disaster Plan needs to be revised. Revisions in library floor plans and priority collections are among the needed changes. Some unit plans were not completed due to pending renovations and some revisions will need to be postponed until the completion of the Suzzallo renovation. Lists of supplies and vendors were never completed.

16. Disaster Prevention Checklist

RECOMMENDATION 16: Reinstate the use of the Disaster Response Checklist

The first stage of disaster preparedness is prevention. The Annual Disaster Prevention Checklist is a useful tool to identify potential problems. Needed revisions are minor and can be made by the Disaster Response Team.

D. PRESERVATION AWARENESS

All library staff and users have a responsibility for the preservation of the collections. Programs that improve visibility for preservation concerns within the Libraries and the University community are an essential part of a preservation program as is staff and user training that is responsive to their

needs and concerns. Appendix I: Preservation Program Components, #10 “Staff Training and User Awareness” provides some examples of past activities.

17. Preservation Web Page

RECOMMENDATION 17: Continue to develop the Preservation Web Page

In 1999, the Preservation Research Assistant created a Preservation web page. This is a useful tool to inform staff and the public about preservation-related concerns.

18. Preservation Training

RECOMMENDATION 18: Develop a preservation awareness and education program for Libraries staff and users.

An initial effort will be to develop a training program for student assistants and programs that increase staff understanding of preservation problems and the options for dealing with problems.

E. RESOURCES

Resources are limited and likely to remain so in the near future. As indicated above preservation staff, budgets, and other resources are dispersed. Strategy 5 is to “Maximize the use of the limited resources available for preservation and expand external sources of funding.” The recommendations in the Resources section are intended to help achieve that strategy.

19. Preservation Services Division

RECOMMENDATION 19: Establish a Preservation Services Division.

Preservation is everyone’s responsibility, but a division provides a focus and a visibility, which is now lacking. A preservation division can provide the infrastructure to achieve preservation objectives by concentrating resources on those objectives, encourage cross-training, provide the flexibility to experiment with new techniques, e.g. paperback stiffening or a new program such as mass deacidification, and provide the concentration of resources necessary for a special project.

20. Task Group on Collection Preservation Priorities

RECOMMENDATION 20: Establish a Task Group on Collection Preservation Priorities

The Task Group would help establish priorities. Responsibilities would include surveying selectors (see Recommendation 2), reviewing Allen grant proposals (see Recommendation 23), identifying projects for possible grant proposals (see Recommendation 25), helping develop guidelines (see Recommendation 21), and providing general advice on the Libraries Preservation Program.

21. Preservation Guidelines

RECOMMENDATION 21: Develop preservation-related guidelines to help maximize our limited resources.

As noted above, staff members have indicated a need for preservation-related guidelines in several areas. These include the following:

- a) Binding policy.
- b) Physical processing of materials
- c) Photocopying of replacement pages
- d) Reformatting of newly received materials that are damaged or in poor condition and when to set aside for review.
- e) Boxing
- f) Interlibrary loan
- g) Use of book trucks and book drops (see Recommendation 12 above.)
- h) Supplies used to process and house materials, etc. (to assure they meet preservation standards).
- i) Material that may be brittle or irreparable or have artifactual value
- j) When do selectors need to be consulted, e.g. can we reduce the need for selector consultation in preservation replacement decisions?
- k) Withdrawals of duplicates (identifying the best copy to keep).
- l) What is rare or needs special housing for security.
- m) In-house repair – what can be done in a unit versus sending to the Mendery?
- n) How to fore-edge (spine down).
- o) Food and drink policy (covered containers).

Guidelines can assist staff in decision-making and help maximize resources.

22. Reformatting and Digitization

RECOMMENDATION 22: Investigate the better coordination of reformatting activities.

Should digital scanning be included with these activities? Microfilming in this library has emphasized newspapers; we need to refine our procedures for filming monographs if we are to engage in monographic filming projects. With the move of the microfilm copy negatives to Sand Point, retrieval procedures need to be revised. Classroom Support Services provides essential chemical photography services for the Libraries photograph collections but has an uncertain future. What can the Libraries do to help assure that these services will continue to be available on campus?

23. Allen Preservation Grants

RECOMMENDATION 23: Establish an Allen Preservation Grant program.

The Allen Endowment Funding for Collections and Information Resources has been very successful. Could a similar program be established for internal preservation programs

utilizing an allocation from Allen Endowment revenue? The University of Maryland and UCLA have such grant programs. At Maryland decisions on how to allocate approximately \$20,000 annually are made by their Preservation Committee. At UCLA, the Preservation Administrator and AUL allocate about \$36,000 a year for special preservation projects. Projects in these libraries have included conservation treatments, deacidification, and re-housing archival collections.

24. Preservation Endowments

RECOMMENDATION 24: Establish preservation endowment funds and include “preservation” in the purpose of all collections endowments.

Other research libraries have established preservation endowment funds to more adequately fund their preservation programs. As indicated above, Brown established a \$3,200,000 preservation endowment using a \$625,000 NEH challenge grant. Harvard has 15 preservation endowments. MIT used the proceeds of book sales to establish a preservation endowment. Ongoing proceeds from book sales and the sale of duplicates are added to endowment principal. For several years at Northwestern, one percent of the collections budget went into a preservation endowment, which now supports many preservation activities. In most instances, preservation endowment funds have been established by individuals, often alumni.

25. Grant Opportunities

RECOMMENDATION 25: Pursue grant opportunities to fund preservation projects.

Several past grants have helped to preserve the Libraries collections. Funding opportunities are limited, but should be utilized. The Task Group on Collection Preservation Priorities (See Recommendation 20) can assist in identifying possible projects. A NEH grant proposal is a target for 2001. Clarifying some of our reformatting procedures is essential to a NEH proposal. (See Recommendation 22)

26. Budget

RECOMMENDATION 26: Align financial resources with preservation priorities.

Different individuals administer the binding, microfilming, pamphlet binding, and preservation replacement budgets. Better coordination of budgets would strengthen our preservation program.

F. REGIONAL AND NATIONAL RESPONSIBILITIES

As the largest library in the region, the University Libraries has been a leader in the Pacific Northwest library community. Fostering “increased cooperative collection development, preservation, and archiving with other institutions” is a priority strategy in our current Strategic plan. Unlike other regions, we lack cooperative preservation activities such as a regional conservation center, OCLC regional network with a preservation program, a statewide preservation program, or consortial agreements with a preservation component. The September 21, 2000 “preservation summit” at the University of Washington will explore some of these options.

We can contribute to the national preservation effort by preserving our unique resources and collections of national significance and by preserving our fair-share of non-unique materials. (21) Also, we have regional collection responsibilities as the “library of last resort” in the Pacific Northwest.

27. Regional and National Responsibilities

RECOMMENDATION 27: Explore opportunities for cooperative preservation.

Our sponsorship of the NEDCC School for Scanning in September, 2000; the NEH grant proposal to bring the CCAHA workshop, “Water, Water Everywhere” to Seattle, and the Preservation Summit in conjunction with the School for Scanning are examples of some activities that can further regional cooperation. The Preservation Summit should offer some ideas for further cooperation. We might also explore possible consortial contracts for mass deacidification through our membership in the Big 12 Plus or with the University of California and Stanford Libraries. As we move towards “archiving” more of our collections in their original formats, we will need to define our regional responsibility for retention of such materials. Revision of *“Designing our Future: Statewide Plan for Libraries”* offers an opportunity to incorporate preservation into statewide planning.

IX. IMPLEMENTATION

“It is a terrifying thought, that the historical record of America as it became a great, complex, continental, multi-ethnic industrialized society is seriously jeopardized simply because we do not pay any attention to the fact that it is not dramatically falling apart but only slowly disintegrating.” (28)

Deterioration can be very quick as in the case of nitrate film, but it also can be a slow process. The temptation is to put off that which isn’t necessarily dramatic or pressing when many tasks require our immediate attention. James Billington’s above remarks are as true today as they were in 1987. Addressing a preservation problem when an item is so deteriorated it can’t be re-shelved or re-housed has its merits, but is also a very limiting approach to preservation. We need reasonable compromises that balance the achievable with the ideal, but we also need a programmatic approach that maximizes our resources. There may be the temptation to put off addressing the preservation needs of traditional materials on the assumption that new technologies will make these formats unneeded, but such a strategy would be short sighted. We need a preservation program that addresses the preservation needs of traditional materials as well as the challenges of new technologies.

The Preservation Office can implement some of the above recommendations. Implementation of other recommendations would entail re-allocating or reorganizing some staff resources and allocating some funding. Staff members, for example, will be needed to serve on the Disaster Response Team and Task Force on Collection Preservation Priorities. Funding will be needed to establish a mass deacidification program and monies allocated to establish an Allen Preservation grant program. Allocating some Allen Endowment revenues might provide some bridge funding for a preservation program. In the long-term, UIF unit specific funding and endowment funding could provide some permanent funding. The forthcoming University capital campaign provides an opportunity to focus some fund raising activities on preservation needs.

In the context of the above, the following timetable for implementation of the recommendations is proposed:

Until Achieved

- *Recommendation 10: Off-campus shelving facility.
- *Recommendation 13: Electronic security systems.

Ongoing

- Recommendation 1: Continue collection surveys.
- Recommendation 17: Continue to develop the Preservation web page.
- Recommendation 18: Preservation training.
- Recommendation 21: Develop preservation-related guidelines.
- *Recommendation 24: Establish preservation endowment funds and include “preservation” in the purpose of all collections endowments.
- Recommendation 25: Pursue grant opportunities to fund preservation projects.
- Recommendation 27: Explore opportunities for cooperative preservation

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- Recommendation 2: Survey selectors to help identify collection preservation needs.
- Recommendation 3: Implement some focus groups to help document preservation needs.
- *Recommendation 4: Implement a mass deacidification program.
- Recommendation 11: Explore the use of data loggers in collections storage areas.
- Recommendation 14: Re-establish the Disaster Response Team.
- Recommendation 15: Revise and update the Disaster Plan.
- Recommendation 16: Reinstate the use of the Disaster Response Checklist.
- *Recommendation 19: Establish a Preservation Services Division.
- *Recommendation 20: Establish a Task Group on Collection Preservation Priorities.
- Recommendation 22: Investigate the better coordination of reformatting activities.
- *Recommendation 23: Establish an Allen Preservation grant program.
- *Recommendation 26: Align preservation budgets with preservation priorities.

2001- 2002

- Recommendation 5: Strategy for unbound paper.
- Recommendation 6: Strategy for audio-visual material.
- Recommendation 7: Strategy for Electronic media and digital archiving
- Recommendation 8: Strategy for 19th century materials and “medium rare.”
- Recommendation 9: Cleaning the collections.
- Recommendation 12: Survey the use of book drops and make recommendations on their use and/or modification.

- * Recommendations requiring new resources or administrative decisions. Some additional information will follow.

FOOTNOTES

1. "The primary mission of the University of Washington is the preservation, advancement, and dissemination of knowledge. The University preserves knowledge through its libraries and collections, its courses, and the scholarship of its faculty..."
UW Role and Mission Statement (Seattle: University of Washington, February 1981; revised February 1998) <<http://www.washington.edu/home/mission.html>> accessed June 1, 2000.
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15. "In the NEH-funded preservation microfilming projects, 65 to 95 percent of the microfilmed brittle books go back on the shelves, either in the main library or off-site." *NEH Project Managers Discuss the Hybrid Approach for Digitization and Preservation Microfilming*. Unpublished report of a September 14, 1999 meeting
16. "RLG and OCLC Explore Digital Archiving" News release March 10,2000. www.oclc.org/org/oclc/press/20000310.htm accessed June 30, 2000. "Cornell computer scientists, libraries collaborate on system to manage digital collections" News release July 28, 1999. www.news.cornell.edu/release/july99/PRISM.ws.html accessed June 30, 2000.
17. Deanna B. Marcum, "Preservation Revisited," *CLIR Issues*, no.13 (January/February 2000): 1-2.
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19. University of Washington Libraries. ARL Preservation Project Study Team. *ARL Preservation Planning Program Background Paper* June 9, 1981 p.39.
20. *Facility Master Plan Update: 1999-2001 Capital Budget Request* p10.
21. *Libraries Facilities Master Plan* <<http://www.washington.edu/change/library/index.html>>, accessed June 19,2000
22. University of Washington Libraries. *Strategic Plan, 1999-2003*. (Seattle: 2000) p.10.
23. The Libraries Strategic Plan unit plans include plans to plan and install book security systems in Chemistry, Drama, Fisheries-Oceanography, Forest Resources and Music branch libraries." The Social Work Library's security system needs to be upgraded.
24. End processing activities are part of many preservation programs. Usually two justifications are given for inclusion in the preservation program: 1) How materials are processed impacts their long-term preservation. 2) Newly received material that may need conservation treatment or reformatting can be evaluated before it goes to the shelf. At UW end processing of books is done in the Monographic Services Division and serials in the Serials Services Division. Archival materials are processed in the Manuscripts, Special Collections, and University Archives Division. Other materials may be processed in other library units.
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APPENDIX I

University of Washington Libraries

Preservation Activities, 1981-June 2000

By Preservation Program Components

1. **Preservation Administration**

ARL Preservation Study, 1981

ARL Preservation Statistics, 1988/89-

ARL Committee on Preservation of Library Materials, Betty Bengtson, Chair, 1993-95

Biennial funding requests: 1981-83, 1983-85, 1985-87, 1987-89, 1989-91, 1991-93,
1993-95

Collection surveys:

1981: Natural Science Library Books, Maps in Map Section, Music Library
recordings

1999-2000: Suzzallo Deweys, East Asia Library

1999: pH Meter acquired.

Commission on Preservation and Access "Membership" (Now part of Council on Library
and Information Resources) 1989/90- (Betty Bengtson, member of Board,
January 1, 1993-1997)

Library Collections Security Officer appointed February 18, 1991

Participation in various preservation surveys/questionnaires-- ongoing

Policy draft and recommendations 1981, 1984

Preservation Administrator appointed full-time, October 1998

Preservation Administrator teaches preservation course in Library School, 1999-

Preservation Collection developed in Special Collections and Preservation, 1981-

Preservation Committees 1983, 1984, 1988-1992

Preservation reference service, staff information, and class presentations—ongoing

Preservation Research Assistant position, January 1999-

Some preservation functions transferred to Special Collections--renamed Special Collections
and Preservation Division, 1984

Space allocated in Special Collections and Preservation workroom in new Allen Library for
expanded preservation program, 1990

2. **Environmental Control**

Environmental monitoring: acquisition of equipment 1981+

Temperature/humidity monitoring--Natural Sciences (1981), Microforms-Newspapers

(1982/83), Auxiliary Stacks, B-51, Kane Cage (1984/85), Kane (1985/86), Drama

(1986/87), Peaches (1986), University Archives (1986) Manuscripts and University

Archives (1992-),

Allen Library--improved environmental conditions 1990

3. Replacement and Reformatting

Brittle books:

Brittle books discussions in CDMC, proposal for Brittle Books Fund, 1987, and Brittle Books presentations for staff, 1988

Irreparable Task Force (Suzzallo Circulation Irreparable Books) 1986 and Preservation Replacement Task force 1991

Preservation Replacement program, pilot 1991, ongoing 1992-

Preservation Photocopying Service: Archival Products (1988-1995); BookLab (1995-1998), Acme (1999-)

Digitization:

Exploration of digitization begins in Special Collections and Preservation, 1994

Grants:

Three Title II-C grants with reformatting components: Native Americans of the Pacific Northwest 1981/82, Pacific Northwest maps and newspapers 1982/83, and Sayre Photo 1986/87.

Library of Congress/Ameritech Digital Library grant, 1998/1999.

Microfilming:

Review of hard copy newspaper backfiles and replacement with microfilm 1981+

Department of Printing discontinues microfilming, 1988. New microfilm contract, August 1991, includes archival quality control standards and provision of 1st and 2nd generation negatives; ongoing microfilming of newspapers resumed on regular basis in 1991

Re-boxing of master microfilm negatives and move to B53, 1992-96

Negative database created in Special Collections, 1992-

International Studies selectors active in Center for Research Libraries Microform projects: Middle East (MEMP), Slavic and East European (SEEMP), South Asia (SAMP), and Southeast Asia (SEAM) Microform projects.

Allen proposal to microfilm and digitize microfilm of UW Publications in Anthropology, 1996

(Implemented as part of the LC/Ameritech Digital Library grant project.)

Photographs:

Ongoing production of copy negatives and prints through Classroom Support Services

4. Conservation

Conservation Technician position descriptions rewritten, position titles changed from Book Restorer to Conservation Technician, salaries increased, 1989.

LBS pamphlet binding program (LBS Archival Products), 1987 (separate budget 1993-94)

Mendery improvements 1981-82 (washing sink, drying racks, and combination press added with HEC Title II-C grant funds) and in 1994 (B72 assigned to Mendery; individual custom-built work benches built and board shear acquired with NEH grant funds.)

NEH "Training the Trainer" Collections Conservation Conference, University of California, Berkeley, 1992. NEH Conservation Training Grant, \$67,537, 1994-95. UW trained 11 library conservation technicians from regional libraries.

- Ongoing treatment program:
 Conservation treatment in Mendery
 Sound restoration in Music Library Listening Center
 Responsibility for reviewing and making conservation treatments decisions for monographs sent for binding/repair transferred to conservation technicians, November 1, 1996.
 Save-A-Book Program: I (Nuremberg Chronicle), 1989; II (John Ogilby's America), 1993;
 III (1905 Baist's Seattle Real Estate Atlas); IV (Samuel Johnson's Dictionary of the English Language, 1755) 1999; V (Sir Walter Raleigh's The History of the World, 1st edition 1614, 2nd edition 1617)
 Staff training (Conservation Technicians have participated in various workshops), 1981–
 Mark Andersson Fulbright Grant to study bookbinding at Uppsala University, Uppsala, Sweden, September 1996-August 1997
 Two Title II-C grants with conservation components (Pacific Northwest maps and newspapers, 1982/83, and Native Americans of the Pacific Northwest, 1981/82)
 Congressional papers project, 1984-86
 Various special projects, e.g., Sayre-Carkeek theater program collection transferred from Seattle Public Library, 1990-91 re-folded and re-boxed using archival supplies, Sarah Cheney Willoughby pencil drawings archivally matted and from with ultraviolet filtered plexiglass and security mounts; insect-infested Nepali materials frozen in Herbarium, 1996-97.
5. **Mass Deacidification**
- Exploration of pilot project (not implemented due to budget cuts), 1993
 Ongoing: monitoring developments
6. **Commercial Library Binding**
- Department of Printing discontinues binding; Contract with Heckman 1986-99; Contract with Bridgeport, 2000-
 Responsibility for monographic binding transferred to Special Collections and Preservation, November 1, 1996
7. **Shelf Preparation**
- Monographic Services responsible for shelf preparation of books; music scores processed in Music Library, archival materials processed in Manuscripts, Special Collections, and University Archives and maps in Map Collection.
 Use of plastic paperclips in Acquisitions processing and other units, 1990
8. **Stack Maintenance and Collections Improvement**
- Storage: Allen Library/Suzzallo renovation, 1990/91--improved storage for collections in Suzzallo/Allen; improved storage in Auxiliary Stacks.
 Security systems added since 1981: Architecture-Urban Planning, Art, Business Administration, East Asia, Engineering, Health Sciences, Mathematics, Physics-Astronomy,

Suzzallo/Allen (in addition to Social Work and OUGL). Strategic Plan Action Plans to install in Chemistry, Drama, Fisheries-Oceanography, Forest Resources, and Music, 2000. Expanded use of archival storage supplies in Manuscripts, Special Collections and University Archives, 1981-
Xerox 5042 Booksaver photocopiers (side copiers) placed in library units, 1990.

9. Emergency Preparedness

Disaster Response Planning: (Disaster plan and 18 unit plans developed and presentations made to unit staffs; salvage priorities established as part of unit plans; preservation checklist; disaster response posters, mylar and battery-operated radios placed in units; some disaster supplies acquired; salvage procedures developed for magnetic and optical media), 1989-1992)

Seismic upgrade of Special Collections map cases (side locking mechanisms added and cases bolted together.)

10. Staff Training and User Awareness

Brittle books presentations for staff, 1988

Copier and food and drink posters, 1982

Co-sponsorship of NEDCC workshops:

Preservation Microfilming, May 16-18, 1994

School for Scanning, September 18-20, 2000

Disaster response staff orientations, 1990-92

Don Etherington talks (disaster recovery – February 28, 1994; role of a conservator in a library preservation program – May 14, 1999)

Friends of the UW Libraries Rare Book Committee program, “Caring for Your Book Collection,” May 22, 1999

KIRO TV news story on the Mendery, October 24, 1995

Murder in the Stacks, 2000

NEH grant proposal, 2000 to bring CCAHA workshop, “Water, Water, Everywhere” to Seattle.

Friends of the UW Libraries Board, August 26, 1996.

Preservation article in winter 1985 Focus

Preservation exhibition, Fall 1983

Preservation notes, Inside WaU, 1990

Rainy Day Bookbags, 1999

Robert Strauss talk on mass deacidification of paper-based collections, April 28, 1999

Note: Preservation program components are from Preservation Program Models: A Study Project and Report, by Jan Merrill-Oldham, Carolyn Clark Morrow, and Mark Roosa. Washington, D.C.: Association of Research Libraries Committee on Preservation of Research Library Materials, 1991. Under each program component are listed UW Libraries preservation activities since 1981.

6/23/00

APPENDIX II

University of Washington Libraries
Preservation Staffing, 1998-99*

Preservation Office

Gary Menges	100%
Mark Bieraugel	50%

Binding

<u>East Asia</u>	
Peggy Lin	8%
SA I	30%

Health Sciences

Linda Oetter-Ayres	100%
Jim Sutthoff	50%
Laura Davis	19%

Serials

Diane Grover	35%
Linda Edwards	100%
Linda Hiatt	100%
Tim LaPlante	75%
Sally Salget	35%
SA II	80%

Special Collections

Jana Peterson	100%
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Collections MaintenanceSuzzallo/Allen

Margaret Sandelin	65%
SA II	25%

Conservation TreatmentMendery

Kate Leonard	100%
Anne Bingham	50%
Judith Johnson	100%
SA I	100%

Odegard Undergraduate

SA II	18%
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MicrofilmingMicroform-Newspaper

Glenda Pearson	15%
Sandra Maddox	90%

Preservation ReplacementSpecial Collections

John Medlin	4%
Lisa Scharnhorst	10% **
SAI	30% **

* ARL Preservation Statistics, 1998-99. Does not include digitizing activities or Law Library.

** Includes time spent on monograph binding end processing/training.

APPENDIX III

ARL Preservation Statistics

The most recently published ARL Preservation Statistics are for 1996-97. The following comparisons are from the raw data for 1997-98 provided by ARL. The comparisons are for the five libraries immediately above the University of Washington in volume count and four of the five libraries immediately below the University of Washington in volume count. (The University of Alberta to date has not provided ARL with their preservation statistics.) The University of Oregon is also included.

Rank by Volume Count	Library-wide Preservation Staff	Preservation Unit Staff
1. Stanford	1. Cornell 35	1. Cornell 24.00
2. Chicago	2. Stanford 33.22	2. Stanford 23.99
3. Cornell	3. Wisconsin 38.26	3. Wisconsin 32.35
4. Indiana	4. Ohio State 23.7	4. Ohio State 11.40
5. Wisconsin	5. North Carolina 22.41	5. Princeton 10.77
6. Washington	6. Princeton 21.48	6. North Carolina 10.65
7. Princeton	7. Indiana 20.51	7. Oregon 10.00
8. Minnesota	8. Chicago 20.4	8. Chicago 7.80
9. Alberta	9. Oregon 18.47	9. Indiana 6.51
10. Ohio State	10. Minnesota 16.99	10. Washington 5.12
11. North Carolina	11. Washington 15.67	11. Minnesota 0
12. Oregon		

Total Pres. Expenditure	% of Total Lib. Expenditures	Expenditures External Sources
1. Cornell	Cornell 8%	Cornell \$771,454
2. Stanford	Stanford 4%	Stanford 88,865
3. Princeton	Princeton 5%	Princeton 10,000
4. Chicago	Chicago 5%	Chicago 244,498
5. Wisconsin	Wisconsin 4%	Wisconsin 206,899
6. North Carolina	North Carolina 4%	North Carolina 10,000
7. Ohio State	Ohio State 4%	Ohio State 60,842
8. Minnesota	Minnesota 3%	Minnesota 0
9. Indiana	Indiana 3%	Indiana 13,715
10. Washington	Washington 3%	Washington 0
11. Oregon	Oregon 4%	Oregon 0

Total Preservation Expenditures in Dollars

1. Cornell	\$2,218,691	7. Ohio State	\$950,225
2. Stanford	1,931,980	8. Minnesota	939,112
3. Princeton	1,305,212	9. Indiana	798,072
4. Chicago	1,164,279	10. Washington	681,101
5. Wisconsin	1,048,849	11. Oregon	525,509
6. North Carolina	959,871		