

Selected Readings in Preservation
1999

Compiled by

The Publication Committee
of the
Society of American Archivists Preservation Section

INTRODUCTION

Selected Readings in Preservation is an annotated list of selected sources released in a given calendar year on archives preservation. It is issued annually by the Society of American Archivists Preservation Section as a service to the Section and the archives community. It is not, however, an official publication of the Society. This issue contains sources from 1999.

Selected Readings in Preservation contains books, reports, periodicals, and articles in English that relate to archives preservation. Geared to the general archives community, it is designed to serve as a convenient reference to selected sources. It is not intended to be comprehensive. To the extent possible, citations include the cost of and instructions for ordering publications. Function and record format structure the list, as follows:

general works (sources that overlap specialized subject areas)

- preservation planning and management

- holdings maintenance

- environmental control

- disaster preparedness and security

- reformatting/imaging

- preservation of paper, parchment and bound records

- preservation of photographs

- preservation of moving images and sound recordings

- preservation of electronic records

The SAA Preservation Section's Publication Committee and Steering Committee coordinate the selection and compilation of citations. Compilers include archivists and preservation specialists who review the preservation literature as part of their work and are qualified to assess it for its usefulness to the archival community. Sources selected for inclusion meet stringent evaluation criteria for content, presentation, and availability. Specifically, selected works contain useful, significant, and accurate information, are clearly written and comprehensible to the preservation non-specialist, and are easy to obtain. Contributors to this issue of Selected Readings in Preservation include Clark Center (University of Alabama), Suzanne Rocky Graham (University of Southern Mississippi), Pam Hackbart-Dean (Georgia State University), Diana Hevener (County of Cape May, New Jersey), Lori Lawrence (Texas Christian University), Janice Mohlhenrich (Emory

University), Glenda Stevens (Texas Christian University), Sarah Talley (Utah State Archives & Records Service). The Publications Committee welcomes your comments on Selected Readings in Preservation.

Clark Center
Chair, Publications Committee
SAA Preservation Section

SERIAL PUBLICATIONS

The Abbey Newsletter. 8 issues/year.

Provides timely information on preservation and conservation subjects, including bookbinding, commercial binding, educational programs, publications, supply sources, and news. Essential reading for the full-time preservation specialist. Ellen McCrady, editor; Abbey Publications, Inc., 7105 Geneva Drive, Austin, Texas 78723. (512) 929-3992, Abbeypub@flash.net, <http://palimpsest.stanford.edu/byorg/abbey/>

The Alkaline Paper Advocate. Quarterly.

Provides timely information about developments in the manufacture and distribution of alkaline paper, including updates on alkaline recycled paper. Widely read in the library and papermaking communities. Ellen McCrady, editor; Abbey Publications, 7105 Geneva Drive, Austin, Texas 78723. (512) 929-3992, Abbeypub@flash.net, <http://palimpsest.stanford.edu/byorg/abbey/>

CLIR Issues. Bimonthly.

Includes a section with preservation and access related articles; focus is on digital initiatives. Issues are available online. Council on Library and Information Resources, Commission on Preservation and Access, 1755 Massachusetts Ave., NW, Suite 500, Washington, DC, 20036-2188. (202) 939-4750, info@clir.org, <http://www.clir.org/cpa/cpanews/cpanews.html>

IFLA Journal. Official Journal of the International Federation of Library Associations and Institutions. Monthly.

Published by K. G. Saur Verlag GmbH & Co. KG, Ostlerstr. 8, D-813773, Munchen, Federal Republic of Germany. (ISSN 034-0352)

Preservation and Access International Newsletter. Quarterly.

Provides timely reports on cooperative national and international preservation activities. Especially useful for administrators. Back issues still available from Council on Library and Information Resources, Commission on Preservation and Access, 1755 Massachusetts Ave., NW, Suite 500, Washington, DC, 20036-2124. (202) 939-4750, info@clir.org

Microform and Imaging Review. Quarterly.

Provides articles on topics related to microform materials and new digital imaging technology. Issues of acquisition, collection development, maintenance, equipment for, and use of microform are all addressed. K.G. Saur, Postfach 701620, D-81316 Munich, Germany. Phone: ++49-89-76902-0, 100730.1341@compuserve.com

WAAC, Western Association for Art Conservation. *Newsletter*. Three times a year. Contains feature articles, and regional news, technical exchange, an event calendar, positions available, and a publication section. WAAC also has a Membership Directory that lists more than 400 manufacturers and suppliers of conservation related materials. WAAC Newsletter, Western Association for Art Conservation, Publication Order c/o Chris Stavroudis, 1272 North Flores Street, Los Angeles, California, 90069. (213) 654-8748, cstavrou@lx.netcom.com, <http://palimpsest.stanford.edu/waac/wn/>

ELECTRONIC RESOURCES

CoOL (Conservation On-line): <http://palimpsest.stanford.edu/>
Essential resource of conservation information. Full text searchable database of conservation information, people in the field and archives of the Conservation Distribution List. Includes full text articles and reports, as well as numerous links to a wide range of resources including conservationrelated organizations, library preservation departments, and full text articles. Many of the library preservation departments have mission statements and procedure manuals on-line <http://palimpsest.stanford.edu/byorg/deptpg.html>.

Clearinghouse of Image Databases: www.library.arizona.edu/images/image_projects.html

Also features archives of the Imagelib listserv

Conserve-O-Gram: <http://www.cr.nps.gov/csd/publications/consveogram/conserv.html>

Council on Library and Information Resources (formerly Commission on Preservation and Access): www.clir.org

Full text version of many of the commission reports.

Digital Libraries. On-line Journal. Monthly: <http://www.dlib.org/>

New edition posted on the 15th of each month. Consists of articles, briefs, resources, links and ready reference dealing with research and development of digital libraries.

Digital Library Federation: www.clir.org/diglib/dlfhomepage.htm

Group of fifteen research libraries formed to investigate creation, management, and archiving of digital information. Has links to federation members and to many digital projects.

RLG DigiNews: www.rlg.org/preserv/diginews

Digital preservation and access issues.

GENERAL WORKS

Alternative Archival Facilities: 14th Annual Preservation Conference. Washington, DC: National Archives and Records Administration, March 1999.

<http://www.nara.gov/arch/techinfo/preserva/conferen/1999.html>

The 1999 topic, *Alternative Archival Facilities*, covered underground storage; cold storage vaults; conventional freezers; adapted space, such as upgraded rooms or storage areas not originally

intended for archival storage; and specially built, high density depository structures where the material is stacked very high, expected retrieval is infrequent, and the building is so well insulated that little air conditioning is necessary. There are special challenges associated with each of these alternatives. For example, How does water drain from an underground room? What are the risks of fire and fire suppression in caves and high density storage areas? The conference papers -available where a link is present -- include standards, hints, tips, and models on how to utilize alternative space for the storage of archival and library materials.

Beck, Ingrid. *Building Preservation Knowledge in Brazil*. Washington, D.C: Council on Library and Information Resources, November 1999, 46pp. ISBN 1-887334-71-8, \$15.

This report describes a highly successful project to mobilize preservation awareness and action throughout Brazil. The project, which has trained more than 3,600 staff members from libraries, archives, and museums throughout the country, began in 1996 and will end phase II of its activity in 2000. The report shows how a core group of committed individuals organized a "grass roots" effort in preservation so broad and effective that it reached parts of Amazonia accessible only by boat. In 1998, the Brazilian government recognized the project by awarding it the prestigious Rodrigo Melo Franco de Andrade, the country's highest award for achievement in cultural heritage.

Conservation OnLine, "Conservation/Preservation Information for the General Public," <http://palimpsest.stanford.edu/bytopic/genpub/>.

While some of these resources are in fact intended for museum, library, and archive professionals, in general they do not require a technical background, and should be of use to the lay public. Some of these sites are vendors of products and services and the information offered is intermixed with commercial content. The include preservation resources listed by organization/company, information on how to find a conservator, and reference services.

Johnson, Catherine J. and Allegra Fuller Snyder. *Securing Our Dance Heritage: Issues in the Documentation and Preservation of Dance*. Washington, D.C: Council on Library and Information Resources. July 1999, 43pp. ISBN 1-887334-69-6, \$15.

Securing Our Dance Heritage focuses on the documentation of, access to, and preservation of our dance heritage. It is coauthored by an eminent dance ethnologist and a leader in the field of dance librarianship. In the first chapter, Allegra Fuller Snyder discusses the cultural and intellectual value of dance and articulates what elements of dance should be recorded and made accessible so that scholars, performers, creators, and the public can grasp fully the rich history of human expression embodied in dance. In the following two chapters, Catherine Johnson explores the various strategies used for making those resources accessible and the problems we face in preserving the fragile media on which these often unique and valuable sources are recorded.

Ogden, Sherelyn (ed.). *Preservation of Library & Archival Materials: A Manual*. (3rd edition) Andover, MA: Northeast Document Conservation Center, December 1999, 412 pp. ISBN: 0-9634685-2-9.

Rapid technical changes and their impact on the preservation profession prompted NEDCC to update and expand the manual by adding important contemporary topics that were not included in the previous edition. Support was provided by the Institute of Museum and Library Services and the National Endowment for the Humanities. The purpose of the manual is to provide the basic,

practical information needed to enable non-conservator staff of libraries, archives, and museums to plan and implement sound collections care programs. It is intended for those who must make decisions that affect preservation of collections, or who want to upgrade standards of care in order to better preserve materials.

Selecting Preservation Supplies: Some Basic Guidelines. Preservation Leaflet. Dallas, TX: Amigos, 1999. <http://www.amigos.org/preservation/selectsupplies.html>

There are a variety of high-quality preservation supplies on the market today that will help to ensure a longer life span for your collections of enduring value. Most preservation supplies are still only available through the mail from preservation suppliers. But some items, such as photograph and postcard sleeves, are increasingly available in photo supply and large discount stores (K-Mart, Walmart, etc.). These are some guidelines to follow, to help with selections of appropriate preservation or archival supplies.

Smith, Abby. *The Future of the Past: Preservation in American Research Libraries.* Washington, D.C: Council on Library and Information Resources, April 1999, 20 pp. ISBN 1-887334-67-X, \$15.

This paper gives an overview of the preservation and management of research collections and describes the context in which decisions are made by researchers and librarians about what to preserve and how. By examining how librarians and scholars grappled with the first great crisis in the preservation of library materials -- the pandemic loss of information printed on embrittled acid paper -- it traces the development of the current consensus on how to manage large collections recorded on many media of varying stability. And the paper addresses the problem that, despite striking progress made in preservation technology and management, the difficulties of preserving original library materials have scarcely diminished over time and demand the same thoughtful cooperation between scholars and librarians as they enter the twenty-first century as the brittle-book problem received in the 1980s.

PRESERVATION PLANNING AND MANAGEMENT

Brown, Karen. *Priority Actions for Preservation. Technical Leaflet.* Andover, MA: Northwest Document Conservation Center, 1999. <http://www.nedcc.org/priority.htm>

Intended for small- and medium-sized historical or non-circulating collections, this checklist includes the many items under such broader topics as building maintenance, climate/ energy efficiency, light control, pest control, housekeeping, water protection, fire protection, security, emergency preparedness, general storage, books, pamphlets, manuscripts and documents, oversized or framed objects, newsprint/clippings, scrapbooks/albums, photographs, photocopying, microfilm, commercial binding, repair program, collections policies, staff/user education, and fundraising.

HOLDINGS MAINTENANCE

Northeast Document Conservation Center. "Removal of Damaging Fasteners from Historic Documents," *Technical Leaflet*, Andover, MA: NEDCC, revised March 1999.

Also available at <http://www.nedcc.org/clips.htm>

Fasteners such as staples, paper clips, string ties, rubber bands, brads, and straight pins frequently damage documents. The damage may be physical: puncturing, tearing or distortion such as creasing. Or chemical damage may result such as staining from the rusting of metal fasteners. Articles provides instructions on how to remove various types of fasteners without damaging your original document.

ENVIRONMENTAL CONTROL

Alleman, Steve. "Coping with an Outbreak of Mold." *LLA Bulletin* (Spring 1999), 217-220. Described the measures, evaluating their effectiveness, taken in response to a mold outbreak that affected a third of the collection at the Earl K. Long Library at the University of New Orleans between in the fall of 1998.

Alternative Archival Facilities: 14th Annual Preservation Conference Held in Washington, DC 25 March 1999 <http://www.nara.gov/arch/techinfo/preserva/conferen/1999.html>

NARA's annual preservation conference in 1999 covered underground storage; cold storage vaults; conventional freezers; adapted space, such as upgraded rooms storage areas not originally intended for archival storage; and specially built, high-density depository structures where the material is stacked very high, expected retrieval is infrequent, and the building is so well insulated that little air conditioning is necessary. The following conference papers (available where a link is present) include standards, hints, tips, and models on how to utilize alternative space for the storage of archival and library materials:

Paul Banks, Consultant "Overview of Alternative Space Options for Libraries and Archives," a survey of current alternative space utilization for archival and library materials;

Richard Judson, Engineer, NARA Space and Security Management, "Standards for Permanent Records Storage and Presidential Libraries," a review of NARA's new standards for Permanent Records Storage and Presidential Libraries;

Doris A. Hamburg, Head, Preventive Conservation, LC and Steven J. Herman, Chief, Collections Management, LC, "High-Density, Cool Temperature Storage at the Library of Congress (LC)," development and assessment of the preservation and access considerations for storing library materials in a high-density, cool temperature depository;

Tom Benjamin, Vice President, Business Development, National Underground Storage, Inc., "Adaptation of Underground Space," an examination of the opportunities and challenges of keeping paper, film, and magnetic media in underground facilities;

Ernest Conrad, P.E., President, Landmark Facilities Group, "The Realistic Preservation Environment," how small institutions can achieve proper environmental conditions for the storage of documents and books;

Robin Siegel, Conservator, National Geographic Society "Building a Small Cold Storage Vault," a case study of a contractor-built cold storage vault within an existing structure;

Mark McCormick-Goodhart, Vice President, Old Town Editions, Inc., "The Cold Storage of Photographic Collections Using Conventional Freezer Technology," a presentation of innovative techniques utilizing microclimate packages and the sealed cabinet approach;

Tom Goonan, President, Tom Goonan Associates, "Special Challenges: Fire and Fire Suppression," warnings regarding the use of space not originally designed for the storage of archival and library materials.

Banks, Paul N. "What Makes Records Deteriorate." *ASHRAE Journal* (April 1999) 41:4, 71-72, 74-76.

Explained the nature of collections, their modes of deterioration and environmental needs; included not only paper items but also photographs, magnetic tape, microfilm, videotapes, and CD-ROMs; treated sources of indoor pollution and the role of temperature and relative humidity in aging; provided a diagram of isoperms (combinations of temperature and relative humidity that result in the same life expectancy for a given material) and a graph of the Preservation Index overlaid on the Time Weighted Preservation Index to show how a sequence of bad and good storage conditions affect the life expectancy of a material.

BTgin, P. et al. "The Effect of Air Pollutants on Paper Stability." *Restaurator* (1999) 20: 1-21. Examined the impact of air pollutants on the permanence of handsheets from six pulp types and four alkaline commercial papers.

Briggs, Charlie. "Archival Storage Rooms." *The Abbey Newsletter* (1999) 23:1, 14. Described the characteristics of rooms built for controlled research environments for agricultural, industrial, and government agencies, including special storage rooms for documents at the Library of Congress and National Archives, from phone-booth size to rooms 5000 feet square with precisely controlled setpoints for temperature and humidity.

McCrary, Ellen. "Mold Facts II: The Effect of Mycotoxins." *The Abbey Newsletter* (1999) 23:1, 7. Lists symptoms and illnesses that have been caused by mold toxins.

_____. "Mold: The Whole Picture, Pt. 1." *The Abbey Newsletter* (1999) 23:4, 45, 48-50, 60. Spurred by a personal encounter with the health hazards associated with mold, author provided historical instances, definitions, generalizations, websites and listservs, and bibliography on the subject.

_____. "Mold: The Whole Picture, Pt. 2, Assessment of Mold Problems." *The Abbey Newsletter* (1999) 23:5, 61-62, 65-67.

Recounted steps to defining problem; recommended teamwork approach; discussed sampling methods; provided sources of information: short courses and symposia and books.

_____. "Mold: The Whole Picture, Pt. 3, A Neglected Public Health Problem." *The Abbey Newsletter* (1999) 23: 6, 73-74, 76-77.

Recorded the personal narratives of persons whose lives or health were affected by mold infestations.

_____. "Mold: The Whole Picture, Pt. 4, Effect of Mold on Schools, Homes, & Human Beings." *The Abbey Newsletter* (1999) 23:7-8, 89-90, 92-93.

Recorded instances of buildings becoming mold infested and presented ways by which one could prepare for such a situation, how to respond, and a list of hard copy and online references

Moore, Mary. "Attack of the Killer Mold Spores." *American Libraries* (March 1999) 30:3, 46-49. Gave an account of the steps taken the Ellis Library at Arkansas State Library to cope with sixteen miles of moldy books.

NesfGntu, Mariana Lucia. "Preservation-a Challenge for the National Library of Romania." *International Preservation News* (March 1999) no. 18, 22-24. Recounted the critically unsuitable storage conditions of their valuable collections; recommended actions for remedying the situation.

Nwokedi, Victor Chhukwuka and Peter Sunday Nedosa. "Studies on Microorganisms Associated with the Deterioration of Some Library Materials in Jos, Nigeria." *African Journal of Library, Archives, and Information Science* (April 1999) 9:1, 75-88. Investigated the microorganisms associated with the deterioration of library book materials in Jos and its environs and found their presence to depend largely on the temperature of the environment; recommended regular cleaning programs and design of library buildings to conservation/preservation requirements of relative humidity, temperature, light and air (ventilation); screened plants for anti-microbial properties with a view to introducing them into paper manufacturing.

Padfield, Tim. "Humidity Buffering by Absorbent Materials in Walls" <http://www.natmus.dk/cons/tp/wallbuff/wallbuff.htm> Advocated the use of porous materials in walls and ceilings as an untapped resource for museum climate control.

Roosa, Mark. "Exhibiting 'Eames': Library Takes Special Care to Safeguard Collections." *Library of Congress Information Bulletin* (May 1999) 59:5, 109. Emphasized the importance of proper handling and conditions to assure a safe environment in exhibitions.

Selwitz, Charles and Shin Maekawa. *Inert Gases in the Control of Museum Insect Pests*. Los Angeles, CA: Getty Conservation Institute, 1999. \$29 This book is relevant to archival collections in its description of methods for ridding boxes of infected papers of various varmints. It describes the biological mechanisms by which inert gases kill insects, the methods and materials needed to create and maintain an anoxic atmosphere; treatments; the construction and use of airtight chambers and low cost bubbles; and procedures for treating objects. Also includes supply sources.

Smith, Elizabeth H. "Mold Abatement in a Remote Storage Facility." *Library & Archival Security* (1999) 15:1, 75-82. Described how Joyner Library at East Carolina University handled a mold outbreak in a remote storage facility; recounted the process used to stabilize the environment, outlined treatment procedures used, and suggested avenues for reducing costs.

DISASTER PREPAREDNESS AND SECURITY

Association of Research Libraries. *Management of library security. Association of Research Libraries SPEC Kit #247*, July 1999.

Reports a survey of 45 respondents, of which only 40% had a security plan. The SPEC Kit includes manuals and procedures of varying quality. They include general policy or purpose statements, rules of conduct, personnel roles and responsibilities, emergency manuals and procedures, incident report forms and training aids.

Arnott, Julie, et. al. *Shelter from the Stormy Blast*. Atlanta, GA: SOLINET, 1999.

Shelter from the Stormy Blast: A Guide to Disaster Recovery Resources in Georgia and the Southeast is a joint publication from SOLINET and the Atlanta Regional Consortium for Higher Education. A guide to regional disaster-related products and services, it is designed to provide a link between the general advice offered by disaster strikes. Highlights include sections on making the most of yellow page listings when locating disaster services and evaluating disaster recovery services. \$5.00

Dorge, Valerie and Sharon Jones (eds.). *Building an Emergency Plan: A Guide for Museums and Other Cultural Institutions*. Los Angeles, CA: Getty Conservation Institute, 1999.

Provides concise and practical information to help develop site-specific plans to protect people, premises, and collections in the event of an emergency. This guide takes users step-by-step through the process of devising an emergency plan tailored to a specific institution and advocates a team approach outlining the major responsibilities. SAA members \$45, Non-members \$50, Product Code 386.

Lewis, Steven. *Disaster Recovery Yellow Pages* (Eighth Edition). Prairie Village, KS: ARMA, 1999, 320 pp. A subscription update service is offered.

Disasters, weather-related and man-made, remind us that we should all be prepared in the event of a disaster. Records managers should include this resource directory in their disaster recovery supply kit because it includes lists and contact information for consulting services, hot sites, emergency equipment, sources, software, training, publications, and supplies; guidelines for preparing a disaster recovery/business continuation plan; and guidelines for planning the disaster recovery process.

Moore, Mary. "Attack of the killer mold spores." *American Libraries* (March 1999), 30:3, 46-49.

Describes reaction and salvage following a major mold outbreak at Arkansas State University. This account of a less-common but ever-threatening problem provides a valuable addition to the disaster literature that focuses on mold as an adjunct to water damage.

Norris, Debbie Hess. *Disaster Recovery: Salvaging Photograph Collections*. Philadelphia, PA: Conservation Center for Art and Historic Artifacts, 1998.

Includes recommendations and guidance on the recovery of water-damaged photographic objects. Contents include recovery options, salvage priorities, initial steps, air drying, freezing, and handling smoke and soot damage.

Reinertson-Sand, Mary. "What I Learned from the Flood of 1997: or, Why Archival Class Is Essential." *American Libraries* (March 1999), 30:3, 40-45.

Documents salvage operations following the Grand Forks, North Dakota flood of 1997, including restoration of films, documents and photographs.

"Selling security to management, staff and researchers." #11 Society of American Archivists. Audiotapes from August 1999 meeting in Pittsburgh. St. Petersburg, FL: Convention Recordings, Inc., August 1999. \$10 plus shipping.

"To put out a fire: fire suppression options for the millenium." #17 Society of American Archivists. Audiotapes from August 1999 meeting in Pittsburgh. St. Petersburg, FL: Convention Recordings, Inc., August 1999. \$10 plus shipping.

REFORMATTING/IMAGING

ANSI/AIIM MS48, Recommended Practice - Microfilming Public Records on Silver Halide Film. Silver Spring, MD: AIIM, 1999. ISBN: 0892583665, \$33.

Covers original first-generation microforms, including Computer Output Microfilm (COM) or other bit map image capable devices, roll film, microfiche, aperture cards, and jacket film. This recommended practice applies to the microfilming of records of federal, state, local, and other public agencies. This recommended practice is compatible with government regulations for the microfilming of permanently valuable records and may be used by private industry to comply with public record requirements.

Chappell, Cressida, et. al. *Digitising History: A Guide to Creating Digital Resources from Historical Documents.* UK: Oxbow Books, 1999. SAA members \$15, Non-members \$20, Product Code 381.

Contains good general information on the computerization of historical source documents and seeks to explain how to ensure that a digital resource is suitable for preservation and migration. Excellent glossary and bibliography.

Frey, Franziska S. and James M. Reilly. *Digital Imaging for Photographic Collections.* Rochester, NY: Image Permanence Institute, 1999. \$10.00. Also available in PDF format for download from the IPI website at <http://www.rit.edu/~661www1/>.

Libraries, archives, and museums are considering digitization as a viable option for preserving their aging and deteriorating photograph collections. This booklet offers guidelines that these cultural institutions may use in their efforts to convert their photographic collections to digital form. It identifies the key issues affecting image quality, clarifies the choices that must be made before embarking on a digitizing project, and explores ways to measure digital image quality. This publication is the result of IPI research funded by the National Endowment for the Humanities.

Gertz, Janet. "Is Digital Conversion Really Part of Preservation?" *Abbey Newsletter* (1999) 23:2 From the PARS Selection for Preservation Discussion Group at the ALA annual meeting, 1999. While not seeing digitization per se as preservation, the author points out a number of ways in which a hybrid approach could enhance preservation efforts and user access.

Kenney, Anne R. and Oya Y. Rieger, eds. *Moving Theory into Practice: Digital Imaging for Libraries and Archives*. Mountain View, CA: Research Libraries Group, 2000. 189 pp. ISBN 0-9700225-0-6.

This new publication from RLG is a self-help reference for libraries, archives, museum or other institutions that choose to reformat cultural resources to digital image form. It advocates an integrated approach to digital imaging programs, from selection to access to preservation, with a heavy emphasis on the intersection of institutional, cultural objectives and practical digital applications.

Smith, Abby. *Why Digitize?* Washington, D.C: Council on Library and Information Resources, February 1999, 13 pp. ISBN 1-887334-65-3, \$15.

This paper was written in response to discussions of digitization at meetings of the National Humanities Alliance (NHA). NHA asked CLIR to evaluate the experiences of cultural institutions with digitization projects to date and to summarize what has been learned about the advantages and disadvantages of digitizing culturally significant materials. As one might expect from the early years of growth of a popular yet experimental technology, the lessons learned vary greatly from one institution to another. What CLIR has found is that digitization often raises expectations of benefits, cost reductions, and efficiencies that can be illusory and, if not viewed realistically, have the potential to put at risk the collections and service libraries have provided for decades. This paper seeks not to raise false alarms, but to encourage every professional responsible for some aspect of cultural custody to assess this new technology with a hopefulness tempered by patience and informed by experience.

PAPER, PARCHMENT, AND BOUND RECORDS

"Gas-Phase Deacidification in Japan." *Abbey Newsletter* (1999) 23:1

An account from a news story about a commercial gas-phase deacidification operation in Japan. The process uses dry ammonia and pure ethylene oxide introduced into a vacuum chamber containing books. The results are said to be excellent.

Havermas, John B. G. A. "Ageing Behaviour of Encapsulated Paper," *Restaurator* (1999) 20:2, 108-115.

Havermas investigates the perceived value of encapsulation using lamination of uncoated polyester. The study concludes that encapsulation does little to protect or preserve paper.

Kissel, Eleonore and Erin Vigneau. *Architectural Photoreproductions: A Manual for Identification and Care*. New Castle, DE: Oak Knoll Press, 1999.

Addresses reproductions commonly used in North American architectural practice from 1860 to approximately 1960. Features a flowchart and 12 comprehensive chapters on individual reproductive processes so that the reader can move easily between them while working with an actual print. includes glossary, bibliography and appendices on care of architectural drawings and prints.

Lawrence, Ken. "Pressure-Sensitive Adhesive United States Stamps." *Abbey Newsletter* (1999) 23:6

This article is not only a good history of the self-stick stamp in the U.S., but it points out the myriad preservation problems inherent in the adhesives.

"Packing and Shipping Paper Artifacts," *Technical Leaflet, Northeast Document Conservation Center*. Andover, MA: NEDCC, revised May 1999.

Also available at <http://www.nedcc.org/ship.htm>

After advising that materials be shipped only when necessary, the leaflet goes on to discuss what to do when there is no other option. Areas covered are insurance in transit, shipping options, packing flat paper objects, wrapping, cushioning, shipping containers, and procedures for special kinds of materials.

Ogden, Shereilyn. "Selection of Suitable-Quality Storage Enclosures for Books & Artifacts on Paper," *Collections Care Network*. Minneapolis, MN: Upper Midwest Conservation Association (Issue 1, 1999): 1-4. <http://www.preserveart.org/newsletterfr.html>

All materials from which enclosures for books and artifacts on paper are made should meet preservation requirements. The use of poor-quality materials causes irreparable damage. Ogden discusses issues to consider when selecting storage enclosures for paper-based materials.

Schechter, Abraham A. *Basic Book Repair Methods*. Libraries Unlimited, 1999. SAA members \$19, Non-members \$25, Product Code 368.

Procedures for the cleaning and mending of paper, book hinge repair, case and textbook re-attachment, cloth rebacking, and retitling. Numerous photos clarify the steps from the viewpoint of the repairer. Focusing on economy, efficiency, and conservation grade materials, the author provides supply lists along with names and addresses of vendors. Also includes a bibliography.

Wishard, Lisa A. and Linda R. Musser. "Preservation Strategies for Geoscience Literature and New Technologies for an Old Literature," *Library Resources and Technical Services*, (July 1999) 43:3, 131-139.

The paper discusses the challenges in handling maps and other oversized items and evaluates present preservation techniques and prioritization of these resources.

PHOTOGRAPHS

Care of Photographs. Technical Leaflet. Andover, MA: Northwest Document Conservation Center, 1999. Also available at <http://www.nedcc.org/phocar.htm>

This leaflet looks at the control of temperature and relative humidity, air pollution and dirt, light levels, handling, and storage systems as affecting the permanence of all photographs, regardless of the photographic processes used.

McCormick-Goodhart, Mark. "The Cold Storage of Photographic Collections Using Conventional Freezer Technology," *Alternative Archival Facilities: 14th Annual Preservation Conference Held in Washington, DC 25 March 1999* <http://www.nara.gov/arch/techinfo/preserva/conferen/1999.html>
Innovative techniques utilizing microclimate packages and the sealed cabinet approach.

MOVING IMAGES AND SOUND RECORDINGS

"Appraisal and long-term preservation of AV archival documents." #9 Society of American Archivists. Audiotapes from August 1999 meeting in Pittsburgh. St. Petersburg, FL: Convention Recordings, Inc., August 1999. \$10 plus shipping.

Burke, Mary A. *Organization of Multimedia Resources: Principles and Practice of Information Retrieval*. Gower Publishing, 1999. SAA members \$68.95, Non-members \$78.95, Product Code 371.

Explains the need for a logical structure for multimedia databases and for consistent description and indexing of their components. It extends the principles of cataloging, classification, indexing and database structure to different multimedia products, identifying the difficulties of providing for multimedia retrieval by organizing data according to subject, creator or other characteristics. Theoretical principles and practical guidelines are given for storage of, and access to, the information content of textual, visual, audio and integrated multimedia databases.

Gallagher, Dennis T. "Moving Image Archiving" <http://members.dca.net/gallagdt/index.html> (last updated August 2000)

Provides links to e-journals, mailing lists, and collections that specialize in motion picture archiving.

Hardy, J. Charles III. "Sound Recording in the Digital Age: Notes from the Field, Parts I & II," *The Abby Newsletter*, 23:2, 20-22 & 23:3, 33-37.

Hardy stresses the need for quality equipment and urges more support for DAT among sound archivists.

Hunter, Jane. "MPEG-7: Behind the Scenes," *D-Lib*, (September 1999) 5:9
<http://www.dlib.org/dlib/september99/hunter/09hunter.html>

Hunter provides a brief description of the objectives and components of the latest attempt to standardize multimedia metadata for digitized audio and visual materials.

Ingalls, Zoe. "At UCLA, a Movie Medic Practices Triage to Save Classic Films," *Chronicle of Higher Education*, (October 15, 1999) 46:8, B2.

Ingalls describes the work on the university's film collection.

Reilly, James. "Why Preserve Film?: Film Decay and How to Slow It: Introduction,"
http://www.filmpreservation.org/basics_decays.html

Provides tips on how to extend the useful life of a variety of film types.

ELECTRONIC RECORDS

Anderson, Elizabeth, Rob Atkinson, Cynthia Crego, Jean Slisz, and Sara Tompson. "Digitizing legacy documents: a knowledge-base preservation project. *Illinois Libraries* (Fall 1998), 80:4, 211-219.

This article discusses the grant-funded work done at the Fermi National Accelerator Laboratory

to digitize a legacy collection of scientific and technical materials and to make them accessible via the Web. The authors include consideration of funding, hardware and software and currently available technology.

ARMA International Standards Committee E-mail Task Force. *Guideline for Managing E-mail*. Prarie Village, KS: ARMA, 2000, 44 pp.

This guideline provides guidance on how to manage E-mail to ensure that the information it contains is created, received, maintained, identifiable, accessible, retrievable, protected, and dispositioned properly. Information contained in E-mail messages and their attachments must be evaluated in the same way as is information contained in other media. They can be "discovered" in the course of litigation, and they can be used as evidence. As such, e-mail should be accorded the same care and consideration as any other recorded information created or received by the organization.

Bellinger, Meg "The transformation from microfilm to digital storage and access." *Journal of Library Administration* (1998), 25:4, 177-185.

This article describes issues related to storage and access to information and documents via a discussion of various projects and techniques for capturing data, including analog preservation (microfilm) digital preservation and descriptions of various imaging projects underway at the Library of Congress, Columbia University, and the Association of Research Libraries.

Besser, Howard, et. al. *The Making of America II Testbed Project: A Digital Library Service Model*. Washington, D.C: Council on Library and Information Resources, December 1999, 42pp. ISBN 1-887334-72-6, \$15.

The work of the Making of America II Testbed Project reported in this paper represents a singular effort in digital library development to find ways to provide access to and navigate a variety of materials. In this endeavor, a digital library service model has been defined that encapsulates the interaction of digital objects (including their metadata), tools, and services based on principles of object-oriented design. In developing the digital library service model, project participants did extensive work to identify and define the structural and administrative (often referred to as technical) metadata elements that are crucial in the development of the digital library services and tools.

Blevins, Tim "Why be afraid? Digital Imaging approached with FEAR." *Microform & Imaging Review* (Winter 1999), 28:1, 9-12.

The FEAR method incorporates consideration of Funding, Equipment/Expertise, Approach, and Rationale. This article discusses digitization of an archives photograph collection using this method. Topics covered include digitization as an appropriate choice; creating objectives; format and compression; alternatives, and outsourcing.

Bouche, Nicole. *Digitization for Scholarly Use: The Boswell Papers Project at The Beinecke Rare Book and Manuscript Library*. Washington, D.C: Council on Library and Information Resources, March 1999, 19 pp. ISBN 1-887334-66-1, \$15.

This paper reports on the digitization of manuscripts from the Boswell Collection by The Beinecke Rare Book and Manuscript Library at Yale University. The paper is one of a series that CLIR is publishing in order to explore strategies for integrating digital technology into the management of

library print and media collections. In this case, the digitization process was designed to serve a group of scholars already at work on a publication series, and so distinguishes itself from many others by its focus on the scholarly communication process rather than on giving broad access to collections through the Internet.

Brand, Stewart "Escaping the digital dark age." *Library Journal* (February 1, 1999), 124:2, 46-48. The obsolescence of digital formats and platforms is the basis for a very real concern for the loss of stored information. This article addresses the difference between digital storage and digital preservation; metadata and the need for standards, and the need for long-term planning to avoid the loss of information as technology evolves.

Casey, Carol. "The cyberarchive: a look at the storage and preservation of web sites." *College & Research Libraries* (July 1998), 59:4, 304-310. Discusses the need for developing preservation strategies for Web resources. Topics covered include physical archiving of Web sites, cyberarchives, collection development and adding Web sites to the collection.

Dearstyne, Bruce W. *Managing Government Records and Information*. Prairie Village, KS: ARMA, 1999, 264 pp. *Managing Government Records and Information* presents strategies and principles of developing records management programs and supporting the orderly, systematic management of government records. It presents government records management within the framework of government information management, the only viable approach in most settings where digital technologies have shifted government executives' attention to information as a strategic resource. This book emphasizes the need for a customer focus and customer involvement in the program.

Dennis, Martin, et. al. *Preserving the Whole: A Two-Track Approach to Rescuing Social Science Data and Metadata*. Washington, D.C: Council on Library and Information Resources, June 1999, 53pp. ISBN 1-887334-68-8, \$15. *Preserving the Whole* appears as the second publication of the Digital Library Federation and reflects the Federation's interests both in advancing the state of the art of social science data archives and in building the infrastructure necessary for the long-term maintenance of digital information. The paper is especially valuable as a meticulously detailed case study of migration as a preservation strategy. It explores the options available for migrating both data stored in a technically obsolete format and their associated documentation stored on paper, which may itself be rapidly deteriorating. The obsolete data format known as column binary was born in the same era of creatively parsimonious coding techniques that have given rise to the widely publicized Year 2000 (Y2K) computer problems.

Dollar, Charles M. *Authentic Electronic Records: Strategies for Long-Term Access*. Chicago, IL: Cohasset Associates, Inc., 1999. SAA members \$75, Non-members \$75, Product Code 905. A comprehensive new study that addresses the most crucial challenge facing today's archivists and records managers: developing a realistic long-term access strategy for electronic records. Includes two very special features: a technology primer for archivists and records managers that examines technical problems such as data representation, structure, storage, and records portability; and cost

data from the United States and Canada to help organizations plan a realistic budget within specific financial constraints.

"Long-term Preservation of Electronic Records: the Inter PARES Project." #40 Society of American Archivists. Audiotapes from August 1999 meeting in Pittsburgh. St. Petersburg, FL: Convention Recordings, Inc., August 1999. \$10 plus shipping.

Falk, Howard "Storing and viewing electronic documents." *Electronic Library* (February 1999), 17:1, 40-44.

Discusses the conversion of fragile library materials to computer storage media to extend the life of the originals and expand access to the intellectual content made available electronically.

Gilliland-Swetland, Anne J. *Enduring Paradigm, New Opportunities: The Value of the Archival Perspective in the Digital Environment*. Washington, D.C: Council on Library and Information Resources, February 2000, 43pp. ISBN 1-887334-74-2, \$15.

This report examines how the archival perspective can be useful in addressing problems faced by those who design, manage, disseminate, and preserve digital information.

Hamid, Sarah "Constructing a Global Time Capsule: Challenges in the Digital Preservation of Society's Cultural Memory Archive." *Information Technology & Libraries* (December 1998), 17:4, 207-211.

This article discusses current debate in the field of electronic archiving. Archivists face decisions concerning which content, media, and political and historical biases will constitute an historical record.

Hedstrom, Margaret "Digital Preservation: a Time Bomb for Digital Libraries." *Computers & the Humanities* (1998), 31:3, 1998, 189-202.

Hedstrom presents the current state of digital preservation, describes requirements necessary to preserve electronic information, and suggests research topics and overall management strategies.

Kranch, Douglas A. "Beyond migration: preserving electronic documents with digital tablets." *Information Technology & Libraries*, V17 n3, Sept 1998, pp138-148.

Strategies other than migration are dealt with here, specifically the creation of digital tablets that store both document content and the software to use them. Useful information on the current life expectancy of various forms of digital media is included.

Results from Five Task Forces appointed by the American council of Learned Societies and the Council on Library and Information Resources. Scholarship, instruction, and libraries at the turn of the century. Washington, D.C.: Council on Library and Information Resources, January 1999. The aim of this report is to examine how digital technology is changing the nature of scholarship and teaching. Five task forces jointly examined this issue by looking at the special requirements of different information resources. Although no one mandate emerges, the recommendations will prompt further discussion and should be adopted where appropriate.

Rothenberg, Jeff. *Avoiding Technological Quicksand: Finding a Viable Technical Foundation for Digital Preservation*. Washington, D.C.: Council on Library and Information Resources, January 1999, 35 pp. ISBN 1-887334-63-7, \$20.

The report follows up Dr. Rothenberg's 1995 article in *Scientific American*, "Ensuring the Longevity of Digital Documents" by elaborating the author's proposal for emulating obsolete software/hardware systems on future, unknown systems, as a means of preserving digital information far into the future. The report, and the research agenda it proposes, will be of interest to managers of digital information resources in libraries and archives, computer scientists, and to all those concerned about the preservation of intellectual resources and records in all formats-including government records, medical records, corporate data, and environmental and scientific data.

Smith, Abby "Preservation in the Digital Age: What Is to Be Done?" *American Libraries*, (March 1999), 30:3, 36-39.

Smith focuses on digital technology as a means of preservation for library collections. Article includes a broad discussion of preservation strategies including environmental control, reformatting options, and disaster preparedness planning.

Smith, Abby *Why digitize?* Washington, D.C.: Council on Library and Information Resources, February 1999.

Written in response to discussions of digitization at meetings of the national Humanities Alliance, this publication evaluates the experiences of cultural institutions with digitization projects and summarizes what has been learned about the advantages and disadvantages of digitizing culturally significant materials.

Wheeler, James. *RLG Magnetic and Optical Media Preservation Manual*. (Mountain View, CA?): Research Libraries Group, 2000. Only offered on the Web at <http://www.rlg.ac.uk/pub.html#guides>.

A concise but comprehensive guide to the major forms of magnetic and optical storage media in which scholarly/research information is held in libraries and archives; their long-term management and care; and the elements of successful magnetic/optical media preservation reformatting projects, from start to finish. Funded through a generous grant from the National Academy of Recording Arts and Sciences, and written by James Wheeler with contributions from Robin Dale. This work brings the approach of RLG's earlier preservation microfilming manuals to bear on audio/video preservation needs, and addresses reliable methods of reformatting and preserving information stored on magnetic and optical media.

Zeidberg, David S. "The archival view of technology: resources for the scholar of the future." *Library Trends*, (Spring 1999), 47:4, 796-805.

Discusses the application of traditional principles of records management to electronic documents, including the need to maintain accessibility as hardware and software components evolve.