

Professional Resources

Archives Preservation Resource Review

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Editor's note: Every effort has been made to provide complete and accurate citations. The nature of the literature on this topic has made it difficult to provide complete information for all items. It is hoped users of this bibliography will find these citations useful for their work.

IN 1990, THE NEWLY REORGANIZED Society of American Archivists' Preservation Section surveyed its membership and found that 53 percent of the survey respondents relied on SAA as their primary source for preservation information and education. The implications of this finding prompted the Preservation Section's Education Committee to explore ways in which it could provide accurate and practical preservation information to the archives community in a timely fashion. This led to the development of the "Archives Preservation Resource Review."

The "Resource Review" is an annotated compilation of English-language publications and other resources on preservation of interest to the archives community. It focuses on materials produced during 1990, though older materials identified as particularly important or relevant are also included. We have limited these additional citations to the last five years because preservation is a constantly evolving field, and sources become rapidly outdated. References to materials predating 1986 may be found in topical bibliographies cited.

SAA's membership is composed of a variety of professionals, ranging from the archivist who works as the sole professional in a small repository to the conservator who is a member of the preservation staff of a large institution. We all share the common goal of preserving our holdings. This review can help each of us meet this goal by enabling us to approach the preservation of our holdings in a responsible and informed manner.

The review responds to the diversity of SAA's membership and contains citations that are introductory as well as technical in content. It also includes library and museum resources that are relevant to archives preservation. Though it should not be considered comprehensive, the review is broad in scope and offers readers an opportunity to increase their familiarity with current preservation literature. The presence of items within the review should not be deemed an

endorsement of their content; an item's inclusion recognizes that it is a part of a body of literature that may be useful in making a preservation-related decision.

The following citations have been grouped by specialized subjects to facilitate use. In searching for information on a preservation topic, readers may need to consult more than one subject heading since many preservation citations overlap subject areas. For example, someone referencing "Micrographics" also might want to check other sections in "Reformatting and Reproduction," as well as "Photographic Materials" and "Environment: Storage, Transport, and Exhibition."

Under each specialized subject, we have marked two or three items with the symbol * to identify standard or especially significant items. The final section of the review cites noteworthy serial and occasional publications, electronic bulletin boards, and databases to help readers keep up with the archival preservation literature.

This review was prepared by Preservation Section Education Committee members Maria Holden (Chief Conservator, New York State Archives and Records Administration), Hilary A. Kaplan (Conservator, Georgia Department of Archives and History), and Kathy Ludwig (Conservator, Minnesota Historical Society) for SAA's Preservation Section. A number of SAA members offered support and helpful suggestions during the review's development. We would like to acknowledge specifically the assistance of the following individuals: Mitchell Hearn Bishop, for clarifying the world of databases; Walter Henry, for summarizing electronic bulletin boards; Christopher Ann Paton, for providing a number of critical entries on audio and video materials; Steven Puglia and Sarah Wagner, for expanding the photographic materials section; and Susan Swartzburg, for additional citations. Special thanks go to Richard J. Cox for his recommendations and encouragement.

The ultimate value of this review can be measured only by its usefulness to the archival community. Your comments and suggestions will help us in future efforts.

HILARY A. KAPLAN
Chief Compiler
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Education Committee

GENERAL WORKS

Adelstein, Peter Z. "Study of Historical Records at the National Archives, Washington, D.C." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 173-79. Paris: International Council on Archives, 1989.

Summarizes findings and recommendations of U.S. National Academy of Science committee to investigate options to preserve paper records. Recommended actions include copying to photographic film, electrostatic copying, and environmental control.

Baker, Cathleen, and F. Christopher Tahk. *Graduate Education and Training for the Archives Conservator*. Buffalo, N.Y.: 1990. 64 pp.

Report of the Planning Project Panel funded by the National Endowment for the Humanities to investigate graduate education for training archives conservators.

Banks, Paul N. "Preservation, Library Collections, and Concept of Cultural Property." In *Libraries and Scholarly Communication in the United States: The Historical Dimension*, 89-110. Edited by Phyllis Dain and John Y. Cole. Westport Ct.: Greenwood Press, 1990.

Examines the nature of cultural property and considers the preservation of information and artifacts within this context.

Basic Conservation of Archival Materials:

A Guide. Ottawa: Canadian Council of Archives, 1990. 119 pp.

Introduction to archives preservation: stresses preventive care and maintenance of holdings, focusing on small to medium-size institutions.

Battin, Patricia. "The Importance of Archives." *American Archivist* 53 (Spring 1990): 188-90.

Discusses the evolution of information media, differences between library and archives collections, and preservation challenges facing the archives community.

Bigelow, Susan. "Duels or Dialogues?: The Relationship Between Archivists and Conservators." *Archivaria* 29 (Winter 1989-90): 51-56.

Assesses the problems of an undefined relationship between archivists and conservators.

Calmes, Alan R. "Relative Longevity of Various Archival Recording Media." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 207-21. Paris: International Council on Archives, 1989.

Analyzes the longevity of archival recording media—including paper, photographic film, magnetic media, and optical disk—according to media properties, storage environment, and frequency of use. Includes discussion of existing media standards and reformatting in response to demand for access.

Chapman, Patricia. *Guidelines on Preservation and Conservation Policies in the Archives and Libraries Heritage*. PGI-90/WS/7. Paris: UNESCO, 1990. 40 pp.

Offers assistance in the preparation and implementation of library and archival preservation policies.

The Conservation Assessment: A Tool for Planning, Implementing and Fundraising.

Marina del Rey, Calif. and Washington, D.C.: Getty Conservation Institution and National Institute for the Conservation of Cultural Property, 1990. 50 pp.

Addresses basic conservation needs within a museum, providing methods for gathering, interpreting, and reporting information essential to successful collections-care policies and practices. Includes a client contact form; previsit questionnaire; collections assessment guidelines and checklist; and architectural assessment guidelines. Forms are designed to help information gathering during an on-site visit and to serve as references for compiling a final report.

Conway, Paul. "Archival Preservation Practice in a Nationwide Context." *American Archivist* 53 (Spring 1990): 204-22.

Results of a nationwide study of archives preservation practices.

Cunha, George Martin. "Current Trends in Preservation Research and Development." *American Archivist* 53 (Spring 1990): 192-202.

Provides an overview of current research under way in preservation. Topics include climate control, mold and insect control, disaster prevention and recovery, mass deacidification, and paper strengthening.

Curtin, Bonnie Rose. "Is Conservation Ready for Artificial Intelligence?" *Abbey Newsletter* 14 (February 1990): 1-2.

Tells of the National Association of Government Archives and Records Administrators' (NAGARA) Preservation Self-Study Project's production and testing of a successful expert system program, *Guide and Resources for Archival Strategic Preservation Planning (GRASP)*, to assist archivists in developing comprehensive preservation programs in their repositories.

———. "Preservation Planning for Archives: Development and Field Testing of

the NAGARA GRASP." *American Archivist* 53 (Spring 1990): 236-43.

Describes the design and field testing of automated archives preservation planning system, *Guide and Resources for Archival Strategic Preservation Planning (GRASP)*, developed by the National Association of Government Archives and Records Administrators.

———. "Preservation Planning in Archives." *AIC Book and Paper Group Annual* 9 (1990): 37-40.

Discusses archival preservation challenges and the development, design, and field testing of the National Association of Government Archives and Records Administrators' *Guide and Resources for Archival Strategic Preservation Planning (GRASP)*.

Darling, Pamela W., and Duane E. Webster. *Preservation Planning Program: An Assisted Self-Study Manual for Libraries*. Washington, D.C.: ARL Office of Management Studies, 1987. 155 pp.

Outlines a process and provides a rationale for preservation planning useful to archivists considering or engaged in preservation planning. Designed as a guide to assist libraries in assessing their preservation needs, setting preservation priorities, formulating a preservation plan, and implementing a comprehensive preservation program. Includes sections that provide a conceptual framework for the planning process and covers modules on environmental conditions, physical condition of collections, organization, disaster control, preservation resources, staff and user education, and interinstitutional cooperation.

Dean, John F. "The Preservation of Books and Manuscripts in Cambodia." *American Archivist* 53 (Spring 1990): 282-93.

Reports on a program in Cambodia to preserve books and manuscripts neglected or destroyed by decades of war.

Ellis, Margaret Holben. *The Care of Prints and Drawings*. Nashville: American Association for State and Local History, 1987. 253 pp.

Reviews the nature of paper and parchment and the media applied to these supports. Also provides storage and environmental recommendations.

Garlick, Karen. "Planning an Effective Holdings Maintenance Program." *American Archivist* 52 (Spring 1990): 256-64.

Elucidates steps to establish a systematic holdings maintenance program aimed at improving the storage environment for records institutionwide.

Garlick, Karen, and Merrily Smith. *Materials at Risk*. Capitol Heights, Md.: National Audiovisual Center, 1990.

Illustrates the preservation problems facing large and small repositories. Available in slide tape or video format and appropriate for lay audiences.

"Glossary of Selected Preservation Terms." *ALCTS Newsletter* 1 (1990): 14-15.

Lists preservation terms agreed upon by the Library Vendors Task Force of the American Library Association's Preservation of Library Materials Section.

Harris, Kenneth, Susan Lee-Bechtold, William K. Wilson, Charles W. Mayn, William M. Holmes, and Alan R. Calmes. *National Archives Preservation Research Priorities: Past and Present*. Technical Information Paper TIP 07 NTIS PB90-206210. Washington, D.C.: National Archives, 1990. 14 pp.

Summarizes National Archives and Records Administration (NARA) preservation research from 1934 to the present. Describes NARA's current preservation program, emphasizing quality control and systems for handling preservation problems.

Hedley, Gerry. "Finding a Structure of Collaboration." *CCI Newsletter* 6 (Autumn-Winter 1990): 8-9.

Stresses the need for collaboration between conservator and scientist, a model presently in use at the Canadian Conservation Institute.

*Jones, Norvell M. M., and Mary Lynn Ritzenthaler. "Implementing an Archival Preservation Program." In *Managing Archives and Archival Institutions*, 185-206. Edited by James Gregory Bradsher. London: Mansell Publishing Limited, 1988.

Provides context for understanding and creating an effective preservation program. Excellent introduction to archives preservation.

Kaplan, Hilary A., and Brenda S. Banks. "Archival Preservation: The Teaming of the Crew." *American Archivist* 53 (Spring 1990): 266-73.

Reviews the current status of archives preservation through the examination of existing and potential educational opportunities, the role of archives preservation personnel, and the distinction between archives and library preservation.

LaRose, Michele. "Conservation Planning and Programs." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 297-308. Paris: International Council on Archives, 1989.

Presents guidelines for developing and implementing an institutional preservation program, with or without in-house conservation staff.

Marcum, Deanna B. *Preservation Education Institute Final Report*. Washington, D.C.: Commission on Preservation and Access, 1990. 9 pp.

Summarizes the commission-sponsored Preservation Education Institute, August 2-4, 1990, which was designed to bring ar-

chivists, library administrators, educators, network staff, and preservation personnel together to explore the possibilities of enhancing preservation's place in the library school curricula.

McCrary, Ellen. "Definitions of Permanence and Durability." *Alkaline Paper Advocate* 2 (October 1989): 42-44.

Notes "inherent difficulties and ambiguities" with the use of these terms, quoting standard definitions.

Morris, Patricia A. "Educational Options for Preservation Administrators: An Afterword on the Preservation Management Institute." *American Archivist* 53 (Spring 1990): 244-48.

Reviews the effectiveness of the Preservation Management Institute, a training program held in the summer of 1987, developed for archives managers by the Society of American Archivists and the Northeast Document Conservation Center.

National Association for Government Archives and Records Administrators (NAGARA). *Guide and Resources for Archival Strategic Preservation Planning (GRASP)*. 2 vols. Atlanta, Ga.: NAGARA, 1990.

Consists of three coordinated tools: a computer-assisted self-study based on an expert system; a manual offering specific planning strategies; and a resource compendium with more than six hundred pages of readings and citations to aid in developing and guiding a preservation program. GRASP was created to help archives systematically address their preservation needs.

———. *Preservation Needs in State Archives*. Albany, N.Y.: NAGARA, 1986; 1988 reprint. iii, 56 pp.

Identifies the preservation problems facing state archives and outlines steps to be taken to advance the preservation of holdings in these institutions. Important study conducted by Howard Lowell.

National Research Council, Committee on Preservation of Historical Records. *Preservation of Historical Records*. Washington, D.C.: National Academy Press, 1986. xvii, 108 pp.

Examines various methods for preserving paper-based records at the National Archives. Looks at environmental criteria, paper, photographic film, magnetic recording media, and optical discs. Offers recommendations for mass treatment, preservation photocopying, preliminary preservation actions, and a preservation strategy. Numerous references.

Oakley, Robert L. *Copyright and Preservation: A Serious Problem in Need of a Thoughtful Solution*. Washington, D.C.: Commission on Preservation and Access, September 1990. 55 pp.

Focuses on the copyright considerations for published materials when reproduction is required to retain information for preservation purposes.

Ogden, Barclay. "On the Preservation of Books and Documents in Original Form." *Abbey Newsletter* 14 (July 1990): 62-64 (Originally published by the Commission on Preservation and Access in 1989).

Considers the preservation of books and documents in original format. Outlines a strategy that encompasses a justification for resources, methodologies for selection, and a range of preservation technologies.

O'Toole, James M. "On the Idea of Permanence." *American Archivist* 52 (Winter 1989): 10-25.

Investigates the concept of permanence and contemplates its meaning. Provocative article that considers that the archives of the future may be unconcerned with physically maintaining materials "permanently."

Paris, Jan. *Choosing and Working with a*

Conservator. Atlanta, Ga.: SOLINET, 1990. 24 pp.

Helps in identifying and negotiating with competent professionals for conservation treatments.

Piggot, Michael. "Conservation." In *Keeping Archives*, 219–52. Edited by Ann Pederson. Sydney, Australia: Australian Society of Archives Incorporated, 1987.

Provides an overview of preservation concerns, emphasizing the importance of preservation and its relationships to all other archival functions.

Pilette, Roberta, and Carolyn Harris. "It Takes Two to Tango: A Conservator's View of Curator/Conservator Relations." *Rare Book and Manuscript Librarianship* 4 (Fall 1989): 103–11.

Considers information needed to make an intelligent conservation decision and how that information may be obtained.

Ritzenthaler, Mary Lynn. "Preserving Family Papers." *Prologue* 22 (Summer 1990): 204–07.

Summarizes problems and recommends practical solutions to individuals interested in preserving papers produced in the last two hundred years.

———. "Holdings Maintenance at the National Archives of the United States." *Restaurator* 10, no. 2 (1989): 151–59.

Describes a program that uses a range of basic preservation activities to prolong the useful life of records through appropriate housing and storage.

*Ritzenthaler, Mary Lynn. *Preservation of Archival Records: Holdings Maintenance at the National Archives*. Technical Information Paper TIP 006; NTIS PB 90-168733/AS. Washington, D.C.: National Archives, 1990. iii, 23 pp.

Provides context as well as practical

techniques for carrying out holdings maintenance activities.

Roper, Michael. *Planning, Equipping and Staffing an Archival Preservation and Conservation Service: A RAMP Study with Guidelines*. PGI-89/WS4. Paris: UNESCO, 1989. 78 pp.

Outlines principles of archival preservation and provides summaries of treatment options and relevant planning considerations. This study is aimed at archivists responsible for planning and managing preservation services in "developing countries," particularly in tropical areas.

Stevens, Michael E. Review of *Are We Losing Our Past?: Records Preservation in the North Carolina State Archives* by David J. Olson and *Keeping Your Past: A Basic Guide to the Care and Preservation of Personal Papers* by Publications Committee, Kansas City Area Archivists. *Midwestern Archivist* 15, no. 1 (1990): 56–58.

Compares these two publications and raises questions about targeting one's audience and the ways in which information or implementation of recommendations can be most effective in educating the public about preservation.

Ward, Philip. "Reflections." *CCI Newsletter* 6 (September 1990): 11–13.

Reflects on the development of the conservation field, the role of the conservator, and the type of training needed by curators.

Waters, Peter. "Phased Preservation: A Philosophical Concept and Practical Approach to Preservation." *Special Libraries* 81 (Winter 1990): 35–43.

Discusses the evolution of the concept of phased preservation. Describes phased preservation at the Library of Congress and the point system for allocating time and resources.

Wright, Sandra. "Conservation Program

Planning at the National Archives of Canada." *American Archivist* 53 (Spring 1990): 314-22.

Relates the development and implementation of the National Archives of Canada conservation policy, which integrates conservation with all other archival functions.

Young, Jeanne, and Nancy G. Miller. *Managing Cartographic and Architectural Records*. Washington, D.C.: National Archives and Records Administration, 1989. 26 pp.

Assists archivists in the creation, maintenance, use, and disposition of maps, aerial photographs, and architectural and engineering drawings.

ENVIRONMENT

Storage, Transport, and Exhibition

Baker, Mary. "Safe Plastics for Storage and Display." *Washington Conservation Guild Newsletter* 15 (November 1990): 4-5.

Summarizes a talk on plastics given at the November Guild meeting.

*Banks, Paul N. "Environmental Conditions for Storage of Paper-based Records." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 77-88. Paris: International Council on Archives, 1989.

Discusses effects of environment on records, informal and formal environmental standards, and theoretical and practical considerations in providing an optimum environment.

Berndt, Harold. "Measuring the Rate of Atmospheric Corrosion in Microclimates." *AIC Journal* 29 (Fall 1990): 207-20.

Presents a method for testing corrosiveness of atmospheres containing organic acids.

Dunlap, Ellen S. "Guidelines for Borrow-

ing Special Collections Materials for Exhibition." *College and Research Libraries News* 51 (May 1990): 430-34.

Addresses logistics for borrowers of special collections materials, prepared by an American Library Association Rare Books and Manuscript Section ad hoc committee.

Harris, Carolyn, and Paul N. Banks. "The Library Environment and the Preservation of Library Materials." *Facilities Manager* 6 (Fall 1990): 21-24.

Reviews preservation problems affecting libraries, emphasizing maintenance of the building and physical environment.

Hansen, Charles, and Ted Honea. "Shrink-wrapping for Moving." *Abbey Newsletter* 14 (February 1990): 17-19.

Explains procedures and project costs for shrink-wrapping rare and fragile materials for safe handling during a move.

Herrera, Mariona. "Analysis of Ozone Concentration and Its Influence on the Archives of the Kingdom of Aragon, Barcelona." *Restaurator* 11, no. 3 (1990): 208-16.

Examines the relationship between ozone inside and outside of an archives building in a heavily polluted location. Concludes that relative humidity does not appear to affect ozone concentrations.

Herskovitz, Robert, and Celeste Brosenne. *Environmental Test Kit for Museums, Libraries and Archives*. St. Paul, Minn.: Minnesota Historical Society, 1990.

Offers useful environmental monitoring information. This manual is distributed by the Preservation Outreach Program of the Minnesota Historical Society in conjunction with monitoring equipment. (Equipment available to Minnesota institutions only.)

*Lull, William P., and M. A. Garrison. "Planning and Design of Museum Storage

Environments." *Registrar* 5 (Spring 1988): 4-14.

Presents guidelines for museum environments applicable to the storage of archives materials.

McCrary, Ellen. "The Advantages of Low RH." *Abbey Newsletter* 14 (February 1990): 15.

Comments on the effects of decreased relative humidity (RH) as it relates to the long-term storage environment for paper artifacts. Notes factors influencing appropriate RH. Sources for recommended RH storage levels are listed, demonstrating a lack of consensus.

———. "A Few High Points from the NARA Conference on Exhibitions." *Abbey Newsletter* 14 (June 1990): 43.

Discusses exhibition illumination limits in terms of an annual cumulative measurement. Suggestions are made for humidity and gaseous pollution control for items in transit.

Morrow, Mary Frances. "Moving an Archives." *American Archivist* 53 (Summer 1990): 420-31.

Surveys ten institutions recently involved in a move. Covers premove planning, logistics of the move, typical problems encountered, and suggestions for streamlining operations.

Motylewski, Karen. "A Matter of Control." *Museum News* 69 (April 1990): 64-67.

Recommends appropriate climate control for the protection of collections in museums. Emphasizes the need for a stable environment and a monitoring program.

*Padfield, Timothy. "Climate Control in Libraries and Archives." In *Preservation of Library Materials*. Vol. 2, 124-38. International Federation of Library Associa-

tions Publications 41. New York: K. G. Saur, 1987.

Articulates the varied concerns of archivists, building engineers, conservation scientists, conservators, and librarians in achieving a beneficial environment for materials.

Parks, E. J., C. M. Guttman, K. L. Jewett, and F. E. Brinckman. *Studies on the Degradation Products of Paper With and Without Pollutants in a Closed Environment, I. Preliminary Results*. (NISTIR 4456). Washington, D.C.: National Archives and Records Administration, May 1990.

Examines degradation products in newspaper and rag papers in gas reactions with and without pollutants. Tentatively identifies six organic acids as degradation products that may be transferred from one paper to another.

Pascoe, M. W. *Impact of Environmental Pollution on the Preservation of Archives and Records: A RAMP Study*. PGI-88/WS/18. Paris: UNESCO, 1988. 44 pp.

Considers the nature of pollutants and their influence on the degradation of archival materials. Includes strategies for dealing with pollutants. Numerous references.

Passaglia, Elio. *The Characterization of Microenvironments and the Degradation of Archival Records: A Research Program*. NBSIR 87-3635. Gaithersburg, Md.: U.S. Department of Commerce/National Bureau of Standards, 1987. 127 pp.

Analyzes the components of a program to study archival containers and microenvironments. Prepared for the National Archives, this report considers that documents housed in containers and not directly exposed to the ambient environment experience a microenvironment that is potentially less damaging than the macroenvironment of the storage area.

Rempel, Siegfried. "Cold and Cool Vault

Environment for the Storage of Historic Photographic Materials.” *Conservation Administration News* 38 (July 1989): 6–9.

Provides basic information and specifications for construction and use of cold storage vaults for photographs. Emphasizes the need for temperature staging to prevent condensation on photographs.

Romer, Grant B. “Can We Afford to Exhibit Our Valued Photographs?” *Picturescope* 32 (1987): 136–38.

Emphasizes the dangers inherent in exhibiting photographs and suggests some alternatives to displaying originals.

Sebera, Donald K. “A Graphical Representation of the Relationship of Environmental Conditions to the Permanence of Hygroscopic Materials and Composites.” In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10–12, 1988*, 51–75. Paris: International Council on Archives, 1989.

Describes a method to graph the relationship of environmental factors to the permanence of hygroscopic materials, such as paper. Using the “isoperm diagram method,” the longevity of paper records in a given environment can be predicted.

Severson, Douglas G. “The Effects of Exhibitions on Photographs.” *Picturescope* 32 (Fall 1987): 133–35.

Describes technique to monitor density changes in photographic materials before and after exhibition. Also considers other condition changes that may occur with exhibited photographs.

Siegel, Robin. “Light-Fading of Color Transparencies on Desk-Tops.” *Topics in Photographic Preservation, AIC Photographic Materials Group 2* (1988): 62–68.

Compares fluorescent light sources and ways in which to reduce the risk of light damage.

Thomas, D. L. *Study on Control of Security and Storage of Holdings: A RAMP Study with Guidelines*. PGI-86/WS/23. Paris: UNESCO, 1987. 62 pp.

Summarizes major factors influencing the preservation of archival holdings. Provides general guidelines for building design and for the protection of records against specific hazards.

*Thomson, Garry. *The Museum Environment*. Boston: Butterworth & Co., 2d ed., 1986. 293 pp.

Provides basic information on environmental control. Classic text on the museum environment, applicable to all repositories.

Weintraub, Steven, and Gordon O. Anson. “Natural Light in Museums: An Asset or a Threat?” *Progressive Architecture* 71 (May 1990): 49–54.

Article explores solutions for good lighting and the preservation of exhibited artifacts.

Biological Control

Boal, Gillian C. “Blast Freezing the Berkeley Law Library Infestation.” *AIC Book and Paper Group Annual* 9 (1990): 17–28.

Presents a case study of an infestation and provides helpful information for recovery actions, specifically, blast freezing.

Brezner, Jerome, and Philip Luner. “Preservation of Library Materials by Microwave Radiation.” In *Paper Preservation: Current Issues and Recent Developments, Proceedings of the 1988 Paper Preservation Symposium*, 111–15. Atlanta: TAPPI Press, 1990.

Reports favorable results from the use of microwave radiation for destroying insects. This technique was not successful for destroying microorganisms, and its effects on the materials on a molecular level have not as yet been determined.

deCesare, Kymron B. J. "Safe Nontoxic Pest Control for Books." *Abbey Newsletter* 14 (February 1990): 16.

Describes the use of an inert nontoxic gas, argon, in an airtight container to kill insects and insect eggs in books. Mechanism of this process is explained as "suffocation in an inert gas." More testing is needed to determine exposure time and effectiveness of this procedure on bacteria and mold.

*Florian, Mary-Lou. "Integrated System Approach to Insect Pest Control: An Alternative to Fumigation." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 253-62. Paris: International Council on Archives, 1989.

Demonstrates an insect pest control approach that does not use fumigation. Emphasis is on prevention of infestation through monitoring and environmental control. Includes guidelines to implement a program.

Lee, Mary Wood. *Prevention and Treatment of Mold in Library Collections with an Emphasis on Tropical Climates: A RAMP Study*. PGI-88/WS/9. Paris: UNESCO, 1988. 81 pp.

Guides archivists in the prevention and basic treatment of mold. Emphasis is placed on mold prevention. Numerous citations.

Nyberg, Sandra. *The Invasion of the Giant Spore*. SOLINET Preservation Leaflet 5. Atlanta, Ga.: SOLINET, 1987. 19 pp.

Explains mold and ways in which it can be treated.

Parker, Thomas. "Integrated Pest Management for Libraries." In *Preservation of Library Materials*, vol. 2, 103-23. IFLA Publication 41. New York: K. G. Saur, 1987.

Discusses the combination of control techniques, such as continual inspection, external building precautions, traps, chem-

icals, moisture control, cleanliness, etc., used to prevent pest problems in the repository.

*Parker, Thomas. *A Study on Integrated Pest Management for Libraries and Archives*. PGI-88/WS/20. Paris: UNESCO, 1988. vi, 199 pp.

Examines the major pests affecting libraries and archives, the damage done to holdings, techniques for pest prevention and control, and the development and implementation of an integrated pest management program.

Valentin, Nieves, and Frank Preusser. "Insect Control by Inert Gases in Museums, Archives and Libraries." *Restaurator* 11, no. 1 (1990): 22-33.

Investigates the elimination of insects by displacing oxygen with an inert gas, nitrogen, as an alternative control method.

*Zycherman, Lynda A., and J. Richard Schrock, editors. *A Guide to Museum Pest Control*. Washington, D.C.: Foundation of the American Institute for the Conservation of Historic and Artistic Works (FAIC) and the Association of Systematics Collections, 1988. xi, 205 pp.

Guides curatorial personnel in controlling pests in the repository: examines institutional policies and compliance with governmental regulations; provides identifying characteristics of pests; and considers treatments. Contains a partially annotated bibliography.

Security and Disaster Preparedness

Allen, Sue. "Theft in Libraries or Archives." *College and Research Library News* 51 (October 1990): 939-43.

Highlights actions following the discovery of a theft.

*Barton, John. "Recovery of Archival Material Following a Disaster." In *Pro-*

ceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988, 291-95. Paris: International Council on Archives, 1989.

Reviews the recovery of archival materials following a disaster. Barton coauthored *An Ounce of Prevention*.

*Buchanan, Sally A. *Disaster Planning, Preparedness and Recovery for Libraries and Archives: A RAMP Study with Guidelines*. PGI-88/WS/6. Paris: UNESCO, 1988. vi, 187 pp.

Provides a practical guide to disaster preparedness, covering prevention, protection, and recovery. Bibliography by Toby Murray. *Compiler's note*: For an updated version of Murray's bibliography, see "Bibliographies" section in this review.

Jackanicz, Donald. "Theft at the National Archives: The Murphy Case, 1962-1975." *Library and Archival Security* 10, no. 2 (1990): 23-50.

Considers methods of monitoring researcher access to facilities and documents. A theft in the 1960s prompted the National Archives to rethink its approach and general philosophy toward security.

McCleary, John P. *Vacuum Freeze-Drying, a Method Used to Salvage Water-Damaged Archival and Library Materials: A RAMP Study with Guidelines*. PGI-87/WS/7. Paris: UNESCO, 1987. vii, 63 pp.

Summarizes the behavior and vulnerability of wet paper and its stabilization by freezing. Discusses how vacuum chambers dry. Examines case studies in which water-damaged materials were salvaged.

McCrary, Ellen. "Control of Fire in Compact Shelving." *Abbey Newsletter* 14 (June 1990): 47.

Discusses fire tests conducted on the compact movable shelving for the National Archives and Records Administration's new facility in College Park, Maryland ("Ar-

chives II"). The tests were performed by Underwriters Laboratory.

Menges, Gary. "ACRL Guidelines for the Security of Rare Book, Manuscript, and Other Special Collections." *College and Research Libraries News* 51 (March 1990): 240-44.

Presents the final version (pending approval by the American Library Association Standards Committee) of guidelines for security. Includes useful addresses for alerting the community to thefts of holdings. Prepared by the Rare Books and Manuscripts Security Committee for the American Library Association.

Moffett, William A. "Guidelines Regarding Thefts in Libraries." *College and Research Libraries News* 49 (March 1988): 159-62.

Suggests preventive actions to deter theft as well as a checklist of actions to be taken once a theft has occurred. Prepared by the Rare Books and Manuscripts Security Committee for the American Library Association.

Morris, John. "Fire Protection in the Library." *Construction Specifier* 42 (October 1989): 133-41.

Covers the history of library fires and policies of fire prevention, stack construction and the spread of fire, elements of a fire protection plan in repository construction, and types of automatic suppression systems.

Motylewski, Karen. "A Checklist of Construction Concerns." *NEDCC NEWS* [Northeast Document Conservation Center] 2 (Spring 1990): 4.

Pinpoints problems that arise from construction and that result in fire dangers, water hazards, security lapses, and collection damage.

*New York State Program for the Conser-

vation and Preservation of Library Materials. *Disaster Preparedness: Planning Resource Packet*. New York: New York State Library, 1988.

Offers guidance to assist those writing a disaster plan, with contributions on disaster planning and recovery by Sally Buchanan. Includes Peter Waters's article on salvaging water-damaged materials.

Storey, Richard, A. M. Wherry, and J. F. Wilson. "Three Views on Security." *Journal of the Society of Archivists* 10 (July 1989): 108-14.

Addresses security issues in English repositories: considers the overall protection of the repository and security in the search room; well-being of a county records office; and the potential identification of thieves, based on their behavior in the reading room.

Sung, Carolyn Hoover, Valerii Pavlovich Leonov, and Peter Waters. "Fire Recovery at the Library of the Academy of Sciences of the USSR." *American Archivist* 53 (Spring 1990): 298-312.

Describes recovery efforts following the disastrous 1988 fire at the Academy of Sciences Library in Leningrad.

Trinka-Randall, Gregor. "Preserving Special Collections Through Internal Security." *College and Research Libraries News* 50 (July 1989): 448-54.

Examines some of the policies and procedures that can be implemented to minimize the possibility of theft or the willful damage to materials by researchers or staff.

Walsh, Betty. "Salvage of Water-Damaged Archival Collections." *Western Association for Art Conservation (WAAC) Newsletter* 10 (May 1988): 2-5.

Provides excellent guidelines for salvaging a variety of water-damaged materials.

Wright, Sandra. "Disaster Planning: A

Management Success Story." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 281-90. Paris: International Council on Archives, 1989.

Offers practical guidelines toward developing and implementing a disaster plan.

Wyly, Mary. "Special Collections Security: Problems, Trends and Consciousness." *Library Trends* 36 (Summer 1987): 241-56.

Observes the trends and breaches in special collections security since 1957; theft has become an acute problem.

Health and Safety

Atwood, Catherine. "Notes on the Preservation of Personal Health." *AIC Book and Paper Group Annual* 9 (1990): 12-16.

Creates an awareness of potential health risks in handling books and documents. Suggestions are made for safe use of materials.

Babin, Angela. "Dichlorvos Carcinogenicity Update." *Art Hazards News* 13, no. 6 (1990): 1-2.

Cites the National Toxicology Program published report (NTP Technical Report no. 342) firmly establishing the carcinogenicity and mutagenicity of dichlorvos, a chemical found in pest control products and often used in collection areas and display cases. Common names include DDVP and Vapona (pest strips). Discourages the use of dichlorvos because no safe level of exposure to carcinogens has been established.

Clark, Raelyn. "Indoor Air Quality." *ASTM Standardization News* 18 (November 1990): 44-50.

Explains how a buildup of gases and particulates result from a variety of sources within a building. Discusses legislation proposed by Congress for further investigation into health implications of indoor air.

Harrison, John R. "Conservation Materials and Their Potential Toxicity: The Science of Toxicology." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 263-72. Paris: International Council on Archives, 1989.

Specifies toxic agents commonly found in conservation laboratories and guidelines for developing an effective health and safety program to protect conservation staff.

National Institute for Occupational Safety and Health (NIOSH). *Indoor Air Quality, Selected References*. Cincinnati: U.S. Department of Health and Human Services, 1989.

Responds to the increasing number of requests for information about indoor air quality and "sick building syndrome." Includes congressional testimony, NIOSH guidelines for conducting investigations, article on evaluating building ventilation systems, and list of publications on indoor air quality.

*Rossol, Monona. *The Artist's Complete Health and Safety Guide*, vol. 4. New York: Allworth Press, 1990. 328 pp.

Offers useful information for conservators dealing with dyes, pigments, inks, plastics, leather, and chemicals.

———, ed. "Hazards of Laser Printers and Copiers." *ACTS FACTS* 4 (October 1990): 2-3.

Explains that pollutants, such as ozone, generated by lasers can cause health problems.

Simon, Matthew J. "The Sick (Library) Building Syndrome." *Library Administration and Management* 4 (Spring 1990): 87-91.

Looks at the effects poorly designed or inadequately sized HVAC systems can have on worker health and productivity. Specific

employee health complaints may be symptomatic of "sick building syndrome."

MACHINE-READABLE RECORDS

Audio and Video

Association for Recorded Sound Collections, Associated Audio Archives Committee. *Audio Preservation: A Planning Study: Final Performance Report*. Silver Spring, Md.: Association for Recorded Sound Collections, 1988. 2 vols. iii, 860 pp.

Finds no broadly recognized standards relating to audio preservation. Includes survey findings, methodology, raw data, and results of related research projects. A complex but very useful source. Glossary and extensive bibliography.

Cuddihy, Edward F. "Stability and Preservation of Magnetic Tape." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 191-206. Paris: International Council on Archives, 1989.

Reports on research into deterioration of magnetic tape with a polyester urethane binder system. Research indicates that binder failure can be avoided by maintenance of proper storage environment.

Curriculum Development for the Training of Personnel in Moving Image and Recorded Sound Archives: A RAMP Study. Paris: UNESCO, 1990. 104 pp.

Focuses on the key issues of standards for education and training of archivists specializing in audiovisual materials.

Easton, Roger. "Conservation of Film, Television and Sound Records." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 163-72. Paris: International Council on Archives, 1989.

Summarizes the ongoing program at the

National Archives of Canada to preserve information in audiovisual records through proper storage, conversion, and copying. Emphasizes the practical issues associated with the program operation.

"Emergency Restoration for Rosengarten Tapes." *Sounds of the South* 2 (July 1990): 1-2.

Describes a method used to clean oral history audiotapes for re-recording following damage by the mud, sand, and salt water of Hurricane Hugo.

Gilmore, Valita, and William H. Leary. *Managing Audiovisual Records: Instructional Guide Series*. Washington, D.C.: National Archives and Records Administration Information Center, 1990. 16 pp.

Presents guidelines to assist staff responsible for creation, maintenance, use, and disposition of audiovisual records. Appendixes include sample inventory forms and federal regulations relating to audiovisual materials.

Kent, Scott. "Binder Breakdown in Back-coated Tapes." *Recording Engineer Producer* 19 (July 1988): 80-81.

Tells how oxide shedding, attributed to binder breakdown, afflicts magnetic tapes produced from the late 1960s to the early 1980s.

*Mallinson, John C. "Magnetic Tape Recording: History, Evolution and Archival Considerations." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 181-90. Paris: International Council on Archives, 1989.

Provides a brief history of audiotape, videotape, and computer tape recording. Discusses deterioration of software and expresses concerns over availability of appropriate hardware.

McCormick, Don, and Seth Winner. "The

Toscanini Legacy." *ARSC Journal* 20 (Fall 1989): 182-90.

Describes various types of sound recordings found in a large New York Public Library collection, along with information on setting priorities for preservation work, cleaning the recordings, re-recording, cataloging, and the use of the collection.

McCrary, Ellen. "A Treatment for Brittle Flaking Tape Recordings." *Abbey Newsletter* 14 (November 1990): 123.

Notes how Agfa research labs in Munich and the United States have found a reliable way to rejuvenate deteriorated tapes long enough to transfer them to a digital master. Agfa will perform this service for record companies and archivists of broadcasting organizations.

Minutes of the Film and Television Archives Advisory Committee (AMIA), October 31-November 4, 1989. Los Angeles: National Center for Film and Video Preservation, American Film Institute [1989]. 23 pp.

Provides reports, descriptions, and summaries relating to film and video preservation.

*Orbanz, Eva, Helen P. Harrison, and Henning Schou. *Archiving the Audio-visual Heritage: A Joint Technical Symposium, Federation Internationale des Archives du Film, Federation Internationale des Archives de Television, International Association of Sound Archives*. Berlin (West): Stiftung Deutsche Kinemathek, 1988.

Addresses issues relating to the preservation of modern audiovisual media. Anthology of excellent papers on film, video, and sound recordings.

Paton, Christopher Ann. "Whispers in the Stacks: The Problem of Sound Recordings in Archives." *American Archivist* 53 (Spring 1990): 274-80.

Discusses the status of sound recordings

in archives and recommends actions to improve their management, such as developing re-recording standards, establishing national or regional recording facilities, and improving appraisal strategies.

Roosa, Mark S. "Audio Tape Transfer." *College and Research Library News* 50 (February 1989): 312–13. Response to Levitt, Martin L. "A Case Study in Audio Tape Transfer." *College and Research Libraries News* 49 (November 1988): 654–57.

Points out potential problems in using the new digital technology RDAT (Rotary Digital Audio Tape) format for the audio preservation project Levitt describes at the Library of Congress. Roosa outlines the goals of archival audio preservation and why the analog format is currently preferred to digital. Response by Levitt follows Roosa's article.

Schüller, Dietrich. "Sound Tapes and the 'Vinegar Syndrome'." *Phonographic Bulletin* 54 (July 1989): 29–31.

Highlights a syndrome that afflicts motion picture films of a cellulose triacetate base that may also affect acetate-based audiotapes. Recommends procedures for examining audiotapes, handling damaged tapes, and preventing future damage.

Spence, John. "Mould: A Growing Problem Too Big to Ignore." *Phonographic Bulletin* 55 (November 1989): 21–25.

Describes conditions that created a mold outbreak in the Radio Archives of the Australian Broadcasting Corporation, along with remedies selected to solve the problem and clean affected tapes.

Storm, William. "Audio Equipment Considerations for Sound Archives." *IASA Phonographic Bulletin* 57 (November 1990): 38–46.

Considers strategies for preserving sound records and explains inherent problems of

the media. Choice of preservation method and equipment are critical. Factors such as compatibility, standardization, quality, and permanence are also discussed.

*Ward, Alan. *A Manual of Sound Archive Administration*. Brookfield Vt.: Gower Publishing Company, 1990. xi, 288 pp.

Presents accurate, reliable information and advice on management of sound archives.

Electronic

*Advisory Committee for the Co-ordination of Information Systems. *Management of Electronic Records: Issues and Guidelines*. New York: United Nations, 1990.

Analyzes the management of electronic records in organizations; full of recommendations for how records managers and archivists can administer such records. Contains numerous references to the "preservation" of electronic records, primarily defined as the provision of access and functionality of such records through internal institutional policies and practices and the technical standards-setting arena. Very important report that should be read by all concerned with the preservation of archival records.

Dollar, Charles M. *A National Archives Strategy for the Development and Implementation of Standards for the Creation, Transfer, Access, and Long-term Storage of Electronic Records of the Federal Government*. Technical Information Paper TIP 08. Washington, D.C.: National Archives, 1990. 22 pp.

Outlines the National Archives and Records Administration's (NARA) planned approach for developing and implementing standards for electronic records, based heavily on the 1989 National Institute of Standards and Technology study. NARA expects to take on a number of activities to enhance the creation and use of standards, including the evaluation of software prod-

ucts for database and document transfer and the identification of requirements for managing the life cycle of electronic records.

Gavrel, Katharine. *Conceptual Problems Posed by Electronic Records: A RAMP Study*. PGI-90/WS/12. Paris: UNESCO, 1990. 44 pp.

Cites problems raised by electronic records in relation to aspects of traditional archival theory and practice.

*Law, Margaret H., and Bruce K. Rosen. *Framework and Policy Recommendations for the Exchange and Preservation of Electronic Records*. Gaithersburg, Md.: National Institute of Standards and Technology, 1989. 48 pp.

Examines the problems of electronic storage and proposes that ample consideration be given to the management, retention, and selective preservation of machine-readable records. Because proper indexing or descriptive information is needed to access electronic records for retrieval and use, this report looks at the internal management requirements and policies needed for the National Archives and Records Administration to avoid information loss. Rapid changes in technology will necessitate continuous monitoring and modifications in methods of storing, maintaining, and retrieving electronic holdings.

Mallinson, John C. "On the Preservation of Human- and Machine-Readable Records." *Information Technology and Libraries* 7 (March 1988): 19-23.

Emphasizes a lack of standards and the obsolescence of equipment as stumbling blocks for preserving machine-readable records.

The Management of Electronic Records in the 1990's: A Report of a Conference Held June 21-23, 1989, Easton, MD. Washington, D.C.: National Archives and Records Administration, August 1990. 34 pp.

Covers the three-day conference, which included representatives from government and the private sector, to develop recommendations for the management of electronic records in the federal government. Dominant themes include the need for records managers to participate in the life cycle of automated information systems and the need to improve communication among disciplines involved in electronic records management.

National Archives and Records Administration. *Electronic Records Issues: A Report to the National Historical Publications and Records Commission*. Washington, D.C.: National Historical Publications and Records Commission, 1990. 11 pp.

Looks at pertinent issues in electronic recordkeeping for the archival community. Offers a summary of problematic aspects of preservation of and access to electronic media. Includes suggestions for a research agenda and project priorities for the future. Interest in electronic records as a major category for National Historical Publications and Records Commission funding prompted the development of this paper.

Oglesby, Thomas R., and William H. Leary. *Managing Electronic Records: Instructional Guide Series*. Washington, D.C.: National Archives and Records Administration, 1990. 32 pp.

Provides guidance on the management of electronic records, emphasizing proper methods for identifying and handling records that may be of enduring value.

*U.S. Congress. Committee on Government Operations. *Taking a Byte Out of History: The Archival Preservation of Federal Computer Records*. Washington, D.C.: Government Printing Office, 1990. 30 pp.

Highlights the need for standardized formats along with compatible equipment capable of reading records stored for future information retrieval. Recommends reeval-

uating and revising preservation policies and embracing long-range planning to ensure the long-term availability of electronic records.

Weir, Thomas E. *3480 Class Tape Cartridge Drives and Archival Data Storage: Technology Assessment Report*. National Archives Technical Information Paper No. 4. Washington, D.C.: National Archives and Records Administration, 1988. 28 pp.

Considers the implications of using the 3480 cartridge as a predominant secondary data storage device in place of reel-to-reel computer tapes. Recommendations for use were delayed because more information was needed about availability of the 3480 for mid-range systems and about the cartridge's increased storage capacity. Problems of chromium dioxide instability appear to have been resolved.

PHOTOGRAPHIC MATERIALS

Adelstein, Peter Z. "History and Properties of Film Supports." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 89-101. Paris: International Council on Archives, 1989.

Reviews photographic film supports (paper, cellulose nitrate, cellulose esters, polyester, and polycarbonate), paying particular attention to their properties.

Babin, Angela. "Celluloid Film Hazards in Conservation." *Art Hazards News* 13, no. 8 (1990): 3.

Summarizes information on motion picture nitrate film: flammability, health problems, storage, disposal, and fire protection.

*Hendriks, Klaus B. "The Stability and Preservation of Recorded Images." In *Imaging Processes and Materials*, *Neblette's 8th edition*, 637-84. New York: Van Nostrand Reinhold, 1989.

Reviews the permanence of photo-

graphs, electrostatically produced materials, and electronically stored images. Emphasis is on photographic images. Though generally technical, sections on preservation and restoration will be useful to the practicing archivist. Extensive references.

Hendriks, Klaus B., et al. "The Duplication of Historical Black-and-White Negatives." *Journal of Imaging Technology* 12 (August 1986): 185-99.

Compares various negative-duplication options for maximum image retention.

Horvath, David. "The Acetate Negative Survey: Final Report." *Topics in Photographic Preservation, AIC Photographic Materials Group 2* (1988): 25-39.

Alerts caretakers of film collections to the chemical instability of cellulose acetate safety film. Important report.

Kennedy, Nora and Peter Mustardo. "Current Issues in the Preservation of Photographs." *AB Bookman's Weekly* 83 (24 April 1989): 1773-83.

Considers the problems and issues of photographic preservation. Discusses the role of the photographic conservator.

Krause, Peter. "Properties and Stability of Color Photographs." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 129-35. Paris: International Council on Archives, 1989.

Provides an overview of the properties of historic and contemporary color photographic materials, indicating how such factors as storage environment, processing procedures, and inherent properties influence stability.

Nadeau, Luis. *Encyclopedia of Printing, Photographic and Photomechanical Processes*. New Brunswick, Canada: 1989. 2 vols. 542 pp.

Distinguishes among reproduction technologies. Reference tool that contains an exhaustive listing of historical and modern, rare and common photographic and photomechanical processes.

Ostroff, Eugene, ed. *Pioneers of Photography: Their Achievements in Science and Technology*. Springfield, Va.: Society for Imaging Science and Technology, 1987.

Includes relevant chapters on the history, technology, and stability of photographic materials.

Puglia, Steven T. "Negative Duplication: Evaluating the Reproduction and Preservation Needs of Collections." *Topics in Photographic Preservation, AIC Photographic Materials Group 3* (1989): 123-34.

Considers options for duplicating photographic negatives.

Ram, A. Tulsi. "The 'Living' Permanence Standards for Photographic Films." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 137-61. Paris: International Council on Archives, 1989.

Reviews the relative permanence of cellulose nitrate, cellulose acetates, and polyester photographic films. Discusses history, materials, and standards.

*Reilly, James M. *The Care and Identification of 19th-Century Photographic Prints*. Rochester, N.Y.: Eastman Kodak Co., 1986. xii, 116 pp.

Identifies photographic processes and provides guidance to caretakers for preserving photographic materials. Standard text.

———. "Stability of Black-and-White Photographic Images, with Special Reference to Microfilm." *Abbey Newsletter* 12 (July 1988): 83-88.

Reilly, James M., Douglas W. Nishimura, Kaspars M. Cupriks, and Peter Z. Adelstein. "Stability of Black and White Photographic Images, with Special Reference to Microfilm." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 117-27. Paris: International Council on Archives, 1989.

Discusses the deterioration mechanisms of black-and-white photographs and microfilm and describes research conducted at the Image Permanence Institute into protecting microfilm images from oxidative attack through sulfiding. Includes information regarding toner treatments for maximizing the image stability of black-and-white photographic images.

Reilly, James M., D. W. Nishimura, L. Pavao, and P. Z. Adelstein. "Photo Enclosures: Research and Specifications." *Restaurator* 10, nos. 3 and 4 (1989): 102-11.

Alerts the reader to the potentially harmful effect storage enclosure components can have on photographs. Summarizes the American National Standards Institute's Standard IT 9.2 for photographic enclosures, discusses an improved "Photographic Activity Test," and provides practical guidelines for choosing appropriate photographic enclosures.

Romer, Grant B. "Guidelines for the Administration and Care of Daguerreotype Collections." *Conservation Administration News* 38 (July 1989): 4-5.

Assists caretakers in the preservation of these early photographs, which dominated commercial photography from 1839 through the 1850s.

Wilhelm, Henry. "Going, Going, Gone." *Popular Photography* 97 (June 1990): 37.

Discusses image stability of modern, commercially available color photographic products.

REFORMATTING AND REPRODUCTION

Available Technologies

Andrews, Harry C. "Redefining Document Management: Whither Electronics, Micrographics?" *Inform 4* (June 1990): 41-43.

Compares advantages and disadvantages of electronic document imaging and micrographics. Lack of standards, legal inadmissibility, and uncertain life expectancy are concerns regarding the use of WORM (write once, read many) for permanent records. New flexible systems combine benefits of both technologies—economy of micrographics storage and speed and convenience of electronic imaging for retrieval.

Balough, Ann. "The Media Decision: Factors in Choosing a Medium for Your Records." Parts 1, 2, and 3. *The Records and Retrieval Report*. 5 (December 1989); 6 (January 1990); 6 (February 1990).

Summarizes the strengths and weakness of paper, microfilm, and optical disc, centering on pertinent issues for the records manager.

Bourke, Thomas A. "Research Libraries Reassess Document Preservation Technologies." *Inform 4* (September 1990): 30-35.

Examines the interrelationship and future of micrographics and electronic imaging in a research library setting.

Courtot, Marilyn. "Opening the Berlin Walls." *Inform 4* (March 1990): 28-35.

Reports on the eighth meeting of the International Organization of Standardization's Technical Committee 171, Micrographics and Optical Memories for Document and Image Recording, Storage, and Use.

Harrington, Richard M., Jr., and Brandt S.

Braunschweig. "Applying Electronic Image Processing to Photostats." *Inform 4* (May 1990): 31-34.

Proposes the use of computer image processing as an alternative to filming when microfilm has not been wholly successful in capturing all images from photostatic originals. Once captured, images can be stored and reproduced on magnetic tape, optical disc, microfilm, or paper.

*Lesk, Michael. *Image Formats for Preservation and Access: Report of the Technology Assessment Advisory Committee to the Commission*. Washington, D.C.: Commission on Preservation and Access, (July) 1990. 10 pp. [Also published in *Information Technology and Libraries* 9 (December 1990), 300-08.]

Examines the feasibility of deacidification, microfilm, digital imagery, and ASCII (nonimage format) as techniques available for book preservation. Current costs and technology still favor film.

Lynn, M. Stuart, and the Technology Assessment Advisory Committee to the Commission on Preservation and Access. *Preservation and Access Technology, the Relationship Between Digital and Other Media Conservation Processes: A Structured Glossary of Technical Terms*. Washington, D.C.: Commission on Preservation and Access, 1990, x, 68 pp. [Also found in *Information Technology and Libraries* 9 (December 1990), 309-36.]

Presents a glossary designed for understanding technological issues.

Saffady, William. *Optical Disks vs. Micrographics as Document Storage and Retrieval Technologies*. Westport, Conn.: Meckler, 1988. 106 pp.

Provides a thorough comparison of micrographic and optical disc technologies for information and storage retrieval.

*Saffady, William. *Micrographic Sys-*

tems, 3d ed. Washington, D.C.: Association of Image and Information Managers, 1990. 242 pp.

Covers basics of micrographic technology and related applications. Standard text.

Imaging

Burger, Andrew J. "Integrating Optical Disk: Microfilm in Electronic Imaging Applications." *IMC Journal* 26 (March-April 1990): 6-8.

Emphasizes that electronic imaging is not limited to optical disc and that imaging supports interactive systems.

Calmes, Alan R. "Monitoring the U.S. Charters of Freedom by Electronic Imaging." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 243-51. Paris: International Council on Archives, 1989.

Describes the National Archives and Records Administration's program implemented to monitor the condition of the charters of freedom through periodic image analysis using a CCD camera and image-processing system.

Grigsby, Mason. "Update: An Overview of Optical Data Systems." *The Records & Retrieval Report* 6 (October 1990): 10-15.

Outlines methodology for implementing optical systems in a records management environment.

Holmes, William M., Jr., "The ODISS Project: An Example of Optical Digital Imaging Application." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 233-41. Paris: International Council on Archives, 1989.

Reports on the National Archives and Records Administration's ODISS pilot project to digitally capture images on paper and microfilm and to store them on optical disc.

Nees, Richard J. "In the Eyes of the Beholder." *Inform* 4 (April 1990): 52-56.

Examines standards issues from the "imaging customer's perspective."

*Vogelgesang, Peter. "Optical Digital Recording." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 223-32. Paris: International Council on Archives, 1989.

Reviews optical recording, including principles and issues of information access and system obsolescence. Provides a good comparison between optical and magnetic recording.

Preservation Photocopying

*Jones, Norvell M. *Archival Copies of Thermofax, Verifax, and Other Unstable Records*. Technical Information Paper TIP 005; NTIS PB90/171836. Washington, D.C.: National Archives, 1990. 17 pp.

Describes a simple "peel test" to determine if a photocopier is making acceptably stable copies by properly fusing toner to paper.

Nicholson, Catherine. "Photocopy Preservation Problems and Hazards." *Society of California Archivists Newsletter* 66 (December 1990): 6.

Explains how electrostatic photocopiers can be a safe and effective preservation tool when properly used. Discusses stability of copies generated by both electrostatic and nonelectrostatic copiers.

Orr, Gloria. "Preservation Photocopying of Bound Volumes: An Increasingly Viable Option." *Library Resources and Technical Services* 34 (October 1990): 445-54.

Compares four photocopy machines suitable for photocopying bound volumes.

Micrographics

Bond, Elayne. "Generic Letter of Agreement for Microfilming." *Abbey Newsletter* 14 (July 1990): 70–71.

Offers a model "fill-in-the-blank" letter useful for initiating customer/vendor communication. This model can be used as a first step in the contract-writing process, in informal letters of agreement, or as an aid for more detailed letters.

Bourke, Thomas A. "Scholarly Micropublishing, Preservation Microfilming, and the National Preservation Effort in the Last Two Decades of the Twentieth Century: History and Prognosis." *Microform Review* 19 (Winter 1990): 4–16.

Reviews the history of micrographics with an emphasis on research libraries. Contains numerous references.

Cady, Susan. "The Electronic Revolution in Libraries: Microfilm Déjà Vu?" *College and Research Libraries News* 51 (July 1990): 374–86.

Traces the history and use of microfilm in libraries, drawing parallels between the expectations and impact of film and electronic media.

Carpenter, Kenneth E., and Jane Carr. "Microform Publishing Contracts." *Microform Review* 19 (Spring 1990): 83–100.

Offers examples of issues that need to be resolved by collection custodians working with commercial microform publishers.

Child, Margaret S. "Selection for Microfilming." *American Archivist* 53 (Spring 1990): 250–55.

Discusses selection of records for preservation in an archival context. Emphasizes the need to incorporate preservation considerations into all phases of archives administration.

*Cox, Richard J. "Selecting Historical

Records for Microfilming: Some Suggested Procedures for Repositories." *Library and Archival Security* 9, no. 2 (1989): 21–41.

Suggests methods for prioritizing microfilm decision-making activities for document preservation. Informational content and projected use figure as primary factors in selection procedures.

Gertz, Janet E. "Preservation Microfilming for Archives and Manuscripts." *American Archivist* 53 (Spring 1990): 224–34.

Considers the advantages of cooperative microfilming projects, along with planning an effective microfilming program.

*Gwinn, Nancy, ed. *Preservation Microfilming: A Guide for Librarians and Archivists*. Chicago: American Library Association, 1987. xxix, 207 pp.

Provides insights into preservation microfilming. Standard work.

Holley, Robert P. "The Preservation Microfilming Aspects of the United States Newspaper Program: Preliminary Study." *Microform Review* 19 (Summer 1990): 124–32.

Examines the microfilming component of the National Endowment for the Humanities funded U.S. Newspaper Program, begun in 1982 and set to conclude in 1997.

Horder, Alan. *Guidelines for the Care and Preservation of Microforms in Tropical Countries*. PGI-90/WS/17. Paris: UNESCO, 1990. 20 pp.

Reviews the factors affecting the permanence of microforms and discusses technical considerations relating to the purchase, processing, management, protection, and control of a microform collection.

Jorgensen, Frank. "Use of 16mm Microfilm in the Danish National Archives." *Abbey Newsletter* 14 (June 1990): 45.

Considers why 16mm microfilm has al-

most entirely replaced 35mm microfilm for security films in the Danish National Archives. Advantages include economy—less expensive camera equipment and reader-printers, better film quality, and simpler microcard fabrication.

Kormendy, Lajos, ed. *Manual of Archival Reprography*. ICA Handbooks Series 5. Munich, Germany: K. G. Saur, 1989. 223 pp.

Assists archivists in micrographics and copy production for the reproduction of documents.

Lockhart, Vickie, and Ann Swartzell. "Evaluation of Microfilm Vendors." *Microform Review* 19 (Summer 1990): 119–23.

Evaluates five vendors that meet the American National Standards Institute's archival production standards for cost, responsiveness, experience in filming bound volumes, turnaround time, meeting deadlines, shipping, and communication. Concludes that an initial "shake-down" period with any vendor is important to create a good working relationship.

Preservation Microfilming: Planning and Production. Papers from the RTSD Preservation Microfilming Institute, New Haven, Connecticut, April 21–23, 1988. Chicago: Association for Library Collections and Technical Services, American Library Association, 1989. 72 pp.

Provides a good introduction and overview of principal issues of microfilming. Six papers.

Rogers, Beth. "Canada on a Thumbnail: Canada's Largest Map Collection Goes onto Microfiche." *Inform* 4 (May 1990): 22–25.

Describes the system for filming and preserving cartographic materials at the National Archives of Canada.

Wassell, James L. "Illini Fighting Redox." *Inform* 4 (May 1990): 26–30.

Summarizes efforts to investigate and resolve problems of redox blemishes found on microfilm at the Illinois State Archives. James Reilly, director of the Image Permanence Institute, comments on this article in a letter to the editor in *Inform* 4 (October 1990).

Westcott, David H. "Response to the Real Final Report on Preservation Microfiche." *Inform* 4 (April 1990): 16–19.

Looks at the use of step-and-repeat microfiche for preservation, archival, and micropublishing purposes.

PAPER AND INKS

Characteristics

"Alkaline Papermaking: PIMA Magazine Roundtable." *PIMA* 72 (May 1990): 23–25.

Compares precipitated calcium carbonate fillers with ground calcium carbonate. Aspects of paper strength, brightness, and flexibility as well as problems of recycling and sizing systems were discussed by participants from chemical and paper companies.

Caulfield, D. F. and D. E. Gunderson. "Paper Testing and Strength Characteristics." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 43–52. Atlanta: TAPPI Press, 1990.

Reviews the mechanical and strength properties of paper, which reflect the intrinsic chemistry, morphology, and structure of paper. Strength may be used as an indicator of paper permanence, a measure of the chemical stability of paper.

Competitive Grade Finder: 1990–91. Exton, Pa.: Grade Finder's Inc., 1990.

Locates fine papers produced in the United

States by type and name. Indications of alkalinity, bulk, brightness, opacity, and distributor are included. Useful reference tool. Updated annually.

Erhardt, David. "Paper Degradation: a Comparison of Industrial and Archival Concerns." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 63–68. Atlanta: TAPPI Press, 1990.

Compares similarities and differences in the way industry and conservation approach paper science, evaluating how industrial testing may be used or modified for conservation. This paper looks at accelerated aging conditions and what they may suggest about degradation reactions and the influence of environmental conditions on paper preservation.

Espy, Herbert H. "The Genesis of Alkaline Sizing and Alkaline-curing Wet-strength Resins." *Alkaline Paper Advocate* 3 (August 1990): 28–29.

Defines alkylketene dimers (AQUA-PEL) and polyamide-epichlorohydrin resins (KYMENE 577). A discussion follows as to how William Barrow used this wet-strength resin and sizing to develop permanent-quality paper.

Garcia, Debra A. "Recycling Capacity to Increase at Record Rates as Laws Proliferate." *Pulp and Paper* 64 (May 1990): 1–5, 11–16, 25–28.

Discusses problems of recycled paper: strength, permanence, and environmental issues.

Kindler, W. A., Jr. "Collection Preservation: The Practical Choices." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 35–37. Atlanta: TAPPI Press, 1990.

Considers the advantages and problems

of the paper medium for archival applications as well as alternative solutions.

Liberatore, Anthony M. "Production of Paper for Libraries." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 85–89. Atlanta: TAPPI Press, 1990.

Places Glatfelter's switch from acid to alkaline papermaking in historical context.

"The Light Stability of Black and Ball-Pen Inks." *McKay Lodge Conservation Report* 1 (Spring 1990): 10.

Discusses ink components that affect lightfastness.

Lindstrom, Tom. "Discussion Contribution: 'Slow Fires—Its Paper Chemistry, Physics and Biology'." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 74–75. Atlanta: TAPPI Press, 1990.

Points to the cooperative association of degradation processes during aging and reflects on the usefulness of accelerated aging tests in light of this condition.

Luner, Philip. "Discussion Continued." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 76–77. Atlanta: TAPPI Press, 1990.

Enumerates changes that occur in paper upon aging and focuses on loss of folding endurance, which is highly correlated with loss in fiber strength, primarily effected by hydrolysis.

*Luner, Philip, ed. *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*. Atlanta: TAPPI Press, 1990. vii, 150 pp.

Organizes papers from the 1988 TAPPI Paper Preservation Symposium into five

categories: Congressional Voices, Preservation Concerns, Testing and Monitoring of Paper Aging, Alkaline Papers, and Book Preservation Technologies. (*Articles of particular interest to archivists have been individually abstracted and appear under their appropriate category in this review.*)

McCrary, Ellen. "Alkaline Recycled Copy Paper." *Alkaline Paper Advocate* 3 (August 1990): 26.

Lists companies that make alkaline recycled copy (xerographic or laser) paper. *Recycled* has been defined by the Environmental Protection Agency as paper that contains one or all of the following: cotton linters, trimmings from printing, and post-consumer waste.

———. "Around the World with Chlorine-Free Pulp." *Alkaline Paper Advocate* 3 (August 1990): 29–30.

Discusses alternatives to elemental chlorine used in the bleaching process by mills in Europe, North America, and the former Soviet Union.

———. "Book Preservation Pressures Speed Up Conversion of Acid Paper to Alkaline." *Pulp Paper* 64 (January 1990): 122–24.

Traces the development of alkaline papermaking and examines permanent characteristics of such papermaking and the pressure exerted on paper manufacturers to convert from acidic to alkaline papermaking.

———. "Fax." *Abbey Newsletter* 14 (June 1990): 46.

Observes how fax copies adversely reacted to a fumigant. (The paper's background turned black.)

———. "Permanent Papers on the Market." *Abbey Newsletter* 14 (November 1990): 132.

Summarizes survey results when Abbey

Publications surveyed sixty-six U.S. paper companies making alkaline paper. Notes compliance with permanence standards and inclusion of pre- and postconsumer waste.

———. Review of "The Effects of Radiation on the Strength of Medial Packaging of Paper" by Norwood Keeney and John Wilkinshaw. *TAPPI Journal* 73 (October 1990): 233–36.

States that this research quantifies the loss of paper strength and brightness due to gamma radiation of 2M, 4M, 6M, 8M, 12M, and 16M rad. Gamma radiation has been used for disinfestation of archival materials.

Miller, J., and Ellen McCrary. "Comparison of pH Pens on the Market." *Alkaline Paper Advocate* 3 (November 1990): 53–55.

Reports on Abbey Publications' survey of seven available pH pens to evaluate their usefulness for reading paper pH. Test method and results are included, along with comparison charts of collected data. Manufacturer's color guides were found to be unreliable. Recommends that pens first be tested on papers of known pH levels, such as buffered papers, which could serve as an interpretive color chart for the future.

Porck, Henk J., Wim J. Th. Smit, Jacob van Heijst, and Idelette van Leewen. "Research on Mass Conservation of Archival and Library Materials." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 69–73. Atlanta: TAPPI Press, 1990.

Describes a project to determine the relationship between air pollutants and the rate of deterioration of paper and other cellulose-containing materials.

Ramsay, Pauline, and David Thomson. "Pens for Museum Documentation." *Con-*

servation News 43 (November 1990): 12–14.

Results of testing sixty-nine pens for resistance to light, water, and chemical solvents.

Rapson, Howard W., C. Bertil Anderson, and Aida Maged. "Natural Aging of Laboratory Bleached Pulps." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 58–62. Atlanta: TAPPI Press, 1990.

Explores yellowing of bleached pulps as they age. Carbonyl groups are considered the main cause of yellowing with age. Other factors include temperature, humidity, and high-energy radiation from the environment and outer space.

*Shahani, Chandru J., and William K. Wilson. "Preservation of Libraries and Archives." *American Scientist* 75 (May–June 1987): 240–50.

Looks at the causes of paper deterioration and investigates methods of preserving it. Good summary.

Walkden, S. A. "Permanence and Durability of Paper." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 81–84. Atlanta: TAPPI Press, 1990.

Summarizes the problems of acidic paper and outlines six areas in which alkaline papermaking offers improvements to the papermaking process.

Waterhouse, John F. "Monitoring the Aging of Paper." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 53–57. Atlanta: TAPPI Press, 1990.

Reviews degradation mechanisms and environmental factors that influence the aging of paper and examines destructive and

nondestructive test methods as possible means for monitoring the state and progress of aging.

Wortley, B. "Questions on Alum Usage Answered." *Alkaline Paper Advocate* 3 (August 1990): 30.

Discusses current industry usage of alum in alkaline papermaking systems.

Standards and Legislation

*Aubey, Rolland. "Specifications and Test Methods Associated with Papers for Permanent Books, Records, and Documents." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 90–93. Atlanta: TAPPI Press, 1990.

Reports on the organizations involved in establishing standards and test methods for paper.

Banik, Gerhard, and Werner Sobotka. "Standard Specification for Permanent Paper in Austria." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 94–95. Atlanta: TAPPI Press, 1990.

Highlights the first European standard for permanent paper; the Austrian standard for uncoated paper and board is based on American National Standard Institute's standard A 39.48-1984 "Permanence of Paper for Printed Library Materials."

*"Draft Technical Plan for NISO." *Information Standards Quarterly* 2 (October 1990): 16–23.

Includes the preservation of library and archival materials as the first of six key study areas requiring NISO's (National Information Standards Organization) special attention for future planning activities.

Lowell, Howard P. "Permanent Paper for State Government Records." *NAGARA Clearinghouse* 6 (Spring 1990): 4–5.

Provides information on legislation affecting permanent and recycled papers on the state and national levels.

McCrady, Ellen. "GPO Takes Affirmative Action." *Alkaline Paper Advocate* 3 (March 1990): 1-2.

Tells how Congress directed the Government Printing Office (GPO) to develop a plan to identify the extent, source, and types of archival printing material produced in-house and acquired commercially by the GPO or other agencies. The task force requests phasing in 10 percent alkaline paper annually for congressional publications, 5 percent for executive branch materials.

_____. "The ISO April Meeting." *Abbey Newsletter* 14 (June 1990): 44.

Discusses methods to be used for round-robin testing related to paper permanence. The standards under consideration for revision are accelerated aging conditions, fiber strength, pH, percentage of calcium carbonate, and maximum allowable lignin content.

_____. "NISO Draft Standard Allows Significantly More Lignin." *Alkaline Paper Advocate* 3 (December 1990): 61-62.

Provides update on the American National Standards Institute/National Information Standards Organization standard for permanent paper for library and archival use, Z39.48, which is being revised to cover both coated and uncoated paper. The revised standard has some changes relative to method of pH determination, maximum allowable lignin content, and replacement of tear resistance with tear index. Excerpts from issues related to the revision are included.

_____. "The Permanent Paper Law." *Abbey Newsletter* 14 (December 1990): 133-34.

Presents text of Public Law 101-423, signed 12 October 1990 by President George

Bush, minus marginal notes and legislative history.

_____. "State Laws Concerning Permanent Paper." *Abbey Newsletter* 14 (October 1990): 108-09.

Furnishes text from six states (Arizona, Colorado, Connecticut, Indiana, North Carolina, and Virginia) that have passed laws requiring the use of alkaline or permanent paper for books and/or records. Texts demonstrate how framers of existing laws dealt with the enforcement of technical issues.

_____. "Testimony of NIC in Favor of H.J. Res. 226." *Alkaline Paper Advocate* 3 (March 1990): 2.

Supports H.J. Resolution 226 to establish a policy on permanent paper. The National Institute for Conservation believes that permanent-quality papers will save millions of dollars that would eventually be needed to deacidify or transfer information on acid paper.

Preserving Knowledge: The Case for Alkaline Paper. Washington, D.C.: Association of Research Librarians in collaboration with the American Library Association, the Commission on Preservation and Access, and the National Humanities Alliance, 1990 revision.

Compiles publications used to promote the case for alkaline paper use. These materials are prefaced by a question-and-answer overview outlining the problems resulting from the use of acidic paper.

Scaggs, Samuel B. "The U.S. Government Printing Office Perspective on the Use of Alkaline Paper." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 96-100. Atlanta: TAPPI Press, 1990.

Describes the various papers used by the U.S. Government Printing Office and how

and why different types of papers are required for specific uses. This article also articulates those restraints perceived by the GPO that inhibit the promotion of alkaline paper for government documents.

Thomas, D. L. *Survey on National Standards on Paper and Ink to be Used by Administration for Records Creation: A RAMP Study with Guidelines*. PGI-86/WS/22. Paris: UNESCO, 1986. 47 pp.

Surveys national archives worldwide, revealing paper permanence standards for each country surveyed.

United States. Congress. House. Government Operations Committee. *Establishing a National Policy on Permanent Papers*. Washington, D.C.: Government Printing Office, 1990. 9 pp.

Presents the text of the report accompanying the joint resolution establishing a national policy on permanent paper.

U.S. Government Printing Office. *Use of Alkaline Paper in Government Printing: Report and Plan Prepared at the Direction of the Committee on Appropriations, House of Representatives*, April 1990. 18 pp.

Cites the role alkaline papers have played thus far in government printing and use.

*Wilson, William K. "Remarks on House Resolution 226 to Establish a National Policy on Permanent Paper." *Alkaline Paper Advocate* 3 (March 1990): 6-8.

States problems and issues involved in promoting permanent paper; a history of the development of standards for production and use of permanent durable paper.

CONSERVATION

Paper Strengthening and Deacidification

Banik, Gerhard, and Werner K. Sobotka. "Deacidification and Strengthening of

Bound Newspapers Through Aqueous Immersion." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 137-43. Atlanta: TAPPI Press, 1990.

Describes the mass preservation of newspapers at the Austrian National Library. This technique includes the deacidification, restrengthening, and cleaning of embrittled papers.

Batton, Susan Sayre. "Nonaqueous Deacidification at Princeton 1982-89: A Progress Report." *Abbey Newsletter* 14 (August 1990): 80-82.

Summarizes 1989 testing results and covers set-up procedures, production results, administrative concerns and problems, and questions and observations about the deacidification agent. Version of a lengthier in-house report.

Bredereck, Karl, Anna Haberditzl, and Agnes Blucher. "Paper Deacidification in Large Workshops: Effectiveness and Practicability." *Restaurator* 11, no. 3 (1990): 165-78.

Looks at the effectiveness of some commercial nonaqueous deacidification methods and self-prepared aqueous buffering baths, by analyzing treated papers. Presents method for enriching water with alkaline earth ions using dolomite.

Clements, D.W.G. "Graft Copolymerization Techniques for Strengthening Deteriorated Paper: British Library Developments." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 149-150. Atlanta: TAPPI Press, 1990.

Offers promising results for paper strengthening based on graft copolymerization techniques initiated by low-intensity gamma radiation.

Clements, D.W.G., C. E. Butler, and C. A. Millington. "Paper Strengthening at the British Library." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 45-50. Paris: International Council on Archives, 1989.

Reports on research at the British Library into strengthening paper by impregnating it with polymers. Discusses mass treatment by chemical means as an alternative to reformatting.

Daniel, Floreal, Francoise Flieder, and Francoise Leclerc. "The Effects of Pollution on Deacidified Paper." *Restaurator* 11, no. 3 (1990): 179-207.

Concludes that papers absorbing greater amounts of alkaline salts as a result of deacidification may also absorb more acidic pollutants than expected. Certain paper types may also suffer greater deterioration if deacidified than if left untreated.

Feasibility Study for Mass Deacidification Centre for Libraries and Archives in Metropolitan Toronto. Toronto: Lord Cultural Resources Planning & Management, Inc., 1989. 143 pp.

Produces results of a feasibility study based on two surveys for a deacidification center in the Toronto area. Various deacidification processes are assessed. Covers a number of issues to be addressed when considering a mass deacidification program.

Holmes, John. "Mass Deacidification of Books at the National Archives and the National Library of Canada." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 144-45. Atlanta: TAPPI Press, 1990.

Describes the mass deacidification system used in Canada.

Howe, Michael, Vladimir Zwass, Morris

Warren, and Jerry Rhoads. "The Book Preservation Associates (BPA) Mass Deacidification Process." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 127-28. Atlanta: TAPPI Press, 1990.

Describes the BPA deacidification process.

Humphrey, Bruce J. "Paper Strengthening with Gas-Phase Parylene Polymers: Practical Considerations." *Restaurator* 11, no. 1 (1990): 48-68.

Highlights the parylene process, which may have useful preservation applications despite its irreversible nature.

———. "Parylene Gas Phase Consolidation: an Overview," In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 133-136. Atlanta: TAPPI Press, 1990.

Focuses on the parylene process and its paper strengthening and mass application prospects.

Jones, Norvell M. M. "Lamination and Encapsulation for Paper Strengthening." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 146-48. Atlanta: TAPPI Press, 1990.

Examines the advantages and disadvantages of lamination and encapsulation, two techniques that have been widely used for strengthening deteriorated papers.

Kozak, John J., and Richard E. Spatz. "Deacidification of Paper by the Bookkeeper Process." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 129-32. Atlanta: TAPPI Press, 1990.

Describes the Bookkeeper deacidification process.

Lienardy, Anne, and Philippe Van Damme. "Practical Deacidification." *Restaurator* 11, no. 1 (1990): 1-21.

Evaluates seven deacidification methods and considers issues of toxicity and solubility of inks and colors.

McCrary, Ellen. "Deacidification vs. Microfilming." *Abbey Newsletter* 14 (October 1990): 112-13.

Discusses criteria for making decisions to microfilm or deacidify books for long-term preservation. The merits of microfilming and deacidification are listed, along with a brief explanation of how each option relates to the concept of a national collection.

———. "L.C. Invites Proposals for Deacidification Service." *Abbey Newsletter* 14 (October 1990): 97-98, 100-02.

Provides excerpts from the Library of Congress's request for proposals, issued on 13 September 1990, to provide mass deacidification for their paper-based books. Includes deacidification priorities, internal logistics, quality assurance, library specifications, documentation requirements, program safety, and maintenance.

———. "Lithco Pilot Plant to Open Soon." *Abbey Newsletter* 14 (April 1990): 26.

Highlights a commercial process said to increase the life of treated book paper by tenfold and to strengthen it as well.

Oye, Raysabro. "The Significance of Deacidification on Paper Properties." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 122-26. Atlanta: TAPPI Press, 1990.

Discusses degradation of paper and deacidification's effect on this process from a technical perspective.

Schwerdt, Peter. *Mass Deacidification Procedures for Libraries and Archives: State*

of Development and Perspectives for Implementation in the Federal Republic of Germany. Washington, D.C.: Commission on Preservation and Access, 1989. 9 pp.

Summarizes work in deacidification procedures conducted by the Battelle Institute. Translated from the German.

Sebera, Donald K. "The Effects of Strengthening and Deacidification on Paper Permanence: Part 1, Some Fundamental Considerations." *AIC Book and Paper Group Annual* 9 (1990): 65-117.

Examines the efficacy of strengthening and deacidification processes on the permanence and durability of paper. This paper includes numerous mathematical and graphic models.

Sebera, Donald K., and Peter G. Sparks. "The Library of Congress DEZ Gas Diffusion Deacidification Process." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 116-21. Atlanta: TAPPI Press, 1990.

Describes the diethylzinc mass deacidification process developed by the Library of Congress, highlighting the objectives this process was designed to meet.

*Smith, Richard D. "Deacidification Technologies: State of the Art." In *Paper Preservation: Current Issues and Recent Developments. Proceedings of the 1988 Paper Preservation Symposium*, 103-10. Atlanta: TAPPI Press, 1990.

Reviews the sources for paper acidity and provides a handy synopsis of existing mass deacidification methods.

*Sparks, Peter G. *Technical Consideration in Choosing Mass Deacidification Processes*. Washington, D.C.: Commission on Preservation and Access, May 1990. 22 pp.

Summarizes technical and logistical fac-

tors to be considered when contemplating a commitment to mass deacidification.

Turko, Karen. *Mass Deacidification Systems: Planning and Managerial Decision Making*. Association of Research Librarians, 1990, 24 pp.

Considers managerial and operational issues of mass deacidification from a library-management perspective.

Williams, Edwin L., and Daniel Grosjean. "Exposure of Deacidified Paper to Ambient Levels of SO₂ and NO₂." *Getty Scientific Program Report*. Marina del Rey, Calif.: Getty Conservation Institute, July 1990.

Reports research of exposing deacidified (magnesium bicarbonate and Wei T'O no. 3) newsprint and chemically bleached wood-pulp book papers to ambient levels of sulfur dioxide and nitrogen dioxide before and after deacidification. Absorption rates and concentrations of sulfates, nitrites, and nitrates were measured.

Treatments and Information

Andrews, Theresa Meyer, William W. Andrews, and Cathleen Baker. "An Investigation into the Removal of Enzymes from Paper Following Conservation Treatment." *AIC Book and Paper Group Annual* 9 (1990): 1–11.

Tells how radioactively labeled enzymes were used to measure the efficiency of rinsing two different alpha-amylases from paper.

Bredereck, Karl, Almut Siller-Grabenstein, and Thomas Wallner. "Possibility of Fixing Inks and Colours upon Paper." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10–12, 1988*, 25–36. Paris: International Council on Archives, 1989.

Reports on research into fixing—making water-soluble inks insoluble—in order to

enable documents to undergo aqueous conservation treatments.

Burgess, Helen D. "The Effect of Alkali on Long-Term Stability of Cellulose Fibers." *Archivaria* 31 (Winter 1990–91): 218–23.

Addresses the reactions of different fibers and media to alkali. (Article also appears in the *AIC Book and Paper Group Annual* 9 [1990].)

Burgess, Helen D., and Nancy E. Binnie. "The Development of a Research Approach to the Scientific Study of Cellulosic and Ligneous Materials." *AIC Journal* 29 (Fall 1990): 132–52.

Outlines a rationale for selecting materials and methods of a research project. Investigates the effects of a fumigant, Vikane (sulphurylfluoride), on cellulosic and ligneous materials.

Derrick, Michele R., Helen Burgess, Mary T. Baker, and Nancy E. Binnie. "Sulfuryl Fluoride (Vikane): A Review of Its Use as a Fumigant." *AIC Journal* 29 (Spring 1990): 77–90.

Provides a comprehensive evaluation of a commercially available fumigant, Vikane (Dow Chemical Company), including information about its use, chemical reactivity, physical properties, efficacy, and toxicity.

"Dirt and Pictures Separated." In *Papers from the UK Institute for Conservation*. January 1990. Twelve papers, 56 pp.

Summarizes current knowledge and little-known facts about the deposition of dirt.

Feller, R. L., and M. Wilt. "Evaluation of Cellulose Ethers for Conservation." *Research in Conservation* 3. Marina del Rey, Calif.: Getty Trust Publications, 1990. 161 pp.

Presents properties of cellulose ethers for conservation. Stability is assessed by dis-

coloration and loss of molecular weight from thermal and photochemical aging.

Gustafson, Ralph A., Ingrid R. Modaresi, Georgia V. Hampton, Ronald J. Chepesiuk, and Gloria A. Kelley. "Fungicidal Efficacy of Selected Chemicals in Thymol Cabinets." *AIC Journal* 29 (Fall 1990): 153-68.

Investigates fungicidal efficacy of eight chemicals that may be used in thymol cabinets. No chemical was found effective for killing indigenous mold on books.

Hindhaugh, Nick. "A pH Survey of an Acidic Text Block." *Paper Conservator* 14 (1990): 17-22.

Offers a procedure for mapping pH by means of a grid system using a polyester film template. The varying pH levels within a badly degraded text block display a pattern of distribution that might help interpret the origin and causes of deterioration.

Howard, Pam Corell. "Mending Lite." *AIC Book and Paper Group Annual* 9 (1990): 41-44.

Describes a mending procedure using methyl cellulose and Tengujo fibers.

Husby, Scott H. "Islamic Book Conservation." *AIC Book and Paper Group Annual* 9 (1990): 45-49.

Explains the conservation of a collection of Islamic bookbindings to be exhibited.

Lienardy, Anne, and Philippe van Damme. "Paper Washing." *The Paper Conservator* 14 (1990): 23-30.

Examines paper washing from a theoretical angle, determining experimentally the influence of various parameters on paper washing and establishing the conditions for optimal results. Also studies the actual effect of an established washing procedure. Factors influencing the speed and efficiency of extracting decomposition products from paper are determined.

Marver, Ian. "Conserving the Record of the First Astronomer Royal." *The Paper Conservator* 14 (1990): 31-45.

Discusses the conservation treatment of a collection of late seventeenth- and early eighteenth-century notebooks and manuscripts. Treatment sequence includes documentation; pH testing; dry cleaning; washing and deacidification; sizing; repair techniques and related materials; equipment and tools; binding methods; and protective housing. Generalized observations are made on why a particular procedure or method of treatment was appropriate.

McCrary, Ellen. "How Leather Dressing May Have Originated." *Abbey Newsletter* 14 (February 1990): 19-20.

Hypothesizes that leather dressing was applied to books to prevent deterioration caused by pollution and residual acid from the tanning and dyeing process. Dressing methods were borrowed from farms and households where grease and other substances were used to protect leather against water and the stiffness that results when wet leather dries. Four antique formulas are given.

Mowery, J. Franklin. "Leafcasting: 'Filling in the Holes': The Current Status of Leafcasting Techniques." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 37-43. Paris: International Council on Archives, 1989.

Provides an overview of the leafcasting process for filling losses in paper documents. Includes a discussion of leafcasting's effectiveness and equipment needs.

Post-Symposium Report. Association of Forensic Document Examiners. May 3-7, 1990. San Antonio, Tex.: July 1990.

Offers information on identifying inks and photocopies.

Price, Lois Olcott. "Unearthing an 'Ar-

cheo': The On-Site Treatment of an Oversized Architectural Drawing and Some Notes on Its Fabrication." *AIC Book and Paper Group Annual* 9 (1990): 50-64.

Presents conservation treatment of an oversized architectural drawing along with the item's interesting historical background.

Rogers, Silvia, and Thomas C. Albro II. "The Examination and Conservation Treatment of the Library of Congress Harkness 1531 Huejotzingo Codex." *AIC Journal* 29 (Fall 1990): 97-115.

Recounts technical examination and conservation treatment of a sixteenth-century Mexican manuscript.

Romao, Paula, Adalio Alarcao, and Cesar Viana. "Human Saliva as a Cleaning Agent for Dirty Surfaces." *Studies in Conservation* (August 1990): 153-55.

Concludes that the alpha-amylase in saliva accounts for its good cleaning ability. Discusses comparison with other cleaning solvents.

Shenton, Helen. "The Conservation of the Heal Textile Sample Books at the Victoria and Albert Museum." *Paper Conservator* 14 (1990): 5-16.

Deals with criteria for establishing conservation priorities and treatment options for twenty-six volumes containing textile samples in the Heal Archives. Criteria considered: to stabilize the volumes; make the volumes safe to handle and minimize further damage; minimize turnaround time; preserve volumes in book form; and use the simplest methods compatible with conservation requirements in order to minimize the amount of time and supervision necessary. Treatment options are assessed with a detailed explanation of a pilot treatment of one volume employing minimum intervention and encapsulation.

Smith, Leslie F., and Barry J. Bauer.

"Properties of PET Films." In *Proceedings of Conservation in Archives: International Symposium Ottawa, Canada, May 10-12, 1988*, 103-15. Paris: International Council on Archives, 1989.

Discusses the manufacture, properties, and relative stability of polyester films, from a technical perspective.

Smith, Martha. "The Conservation of Islamic Book Pages." *AIC Book and Paper Group Annual* 9 (1990): 118-19.

Describes how water-soluble or flaking inks, pigments, and gold, as well as burnished paper, dictate the limitations of conservation treatments possible for these materials.

Vodopivec, Jedert, and Meta Cernic-Letnar. "Applying Synthetic Polymers to Conserve Cultural Property on Paper." *Restaurator* 11, no. 1 (1990): 34-47.

Provides results of experiments that used synthetic polymers (cellulose ethers, polyacryl, polyvinyl alcohol) as adhesives, strengthening agents, and temporary protection for records during conservation treatment.

Wanser, Heather. "The Unveiling of A. J. Downing's Victorian Plan for Washington, D.C., 1851." *AIC Book and Paper Group Annual* 9 (1990): 120-29.

Relates the examination and application of cellulose acetate film in the conservation treatment of one of the Library of Congress's treasures.

Watkins, Stephanie. "Chemical Watermarking of Paper." *AIC Journal* 29 (Fall 1990): 117-31.

Investigates a twentieth-century watermark and its reaction to various treatments.

BIBLIOGRAPHIES

Archival Science Bibliography 1986-1988. Ottawa: Canadian Centre for Information

and Documentation on Archives (CCIDA), 1988. 176 pp.

General archival bibliography.

Archives Library Information Center (ALIC) Bibliographies. Washington: ALIC/National Archives and Records Administration, 1990. 6 pp.

General archival bibliographies.

Art Hazard News 13, no. 4 (1990).

Special resource issue listing organizations and publications highlighting safety.

Bowling, Mary. "Literature on the Preservation of Non-Paper Materials." *American Archivist* 53 (Spring 1990): 340-48.

Recent literature on the preservation of nonpaper records, including sound recordings, moving images, photographs, microforms, and magnetic and optical media.

Churchville, Lida Holland and Catherine Hale. *Disaster Planning*. Washington, D.C.: Archives Library and Information Center Bibliography, 1990.

The Conservation Assessment Bibliography. Marina del Rey, Calif. and Washington, D.C.: Getty Conservation Institution and National Institute for the Conservation of Cultural Property, 1990. 45 pp.

Conway, Paul. *Administration of Preservation Program in Archives: A Selective Bibliography*. Washington, D.C.: Archives Library Information Center Bibliography, 1990. 11 pp.

Directory: Information Sources on Scientific Research Related to the Preservation of Books, Paper, and Adhesives. Washington, D.C.: Commission on Preservation and Access, March 1990. 28 pp.

Includes laboratories and organization; indexes, abstracts, and databases; publications and newsletters; and a report: "Preservation Research at the Library of

Congress: Recent Progress and Future Trends," by Chandru J. Shahani.

Fox, Lisa L., compiler. *A Core Collection in Preservation*. Chicago: American Library Association/Resources and Technical Services Division, 1988. 15 pp.

Gerhard, Claire. *Preventive Conservation in the Tropics*. New York: Institute of Fine Arts/New York University, September 1990. 10 pp.

Hendriks, Klaus B., and Anne Whitehurst, compilers. *Conservation of Photographic Materials: A Basic Reading List*. Ottawa: National Archives of Canada, 1988. 32 pp.

Kesse, Erich J. "The Reproduction of Library Materials in 1989." *Library Resources and Technical Services* 34, no. 4, (1990): 467-75.

Provides resources of interest to librarians and archivists concerned with reprographic and imaging industries.

Morse, Elizabeth. *Enzyme Treatment: The Science and the Applications in Conserving Artistic and Historic Works: A Selected Bibliography 1940-1990*. Abbey Publications, 1990, 17 pp.

Bibliography resulting from the seminar sponsored by *Technology and Conservation*.

Murray, Toby. *Bibliography on Disaster, Disaster Preparedness and Disaster Recovery*. Oklahoma City: Oklahoma Conservation Congress, 1990. 59 pp.

Newman, Wendy. "Sources of Information on Health and Safety for Archivists and Conservationists." In *Proceedings of Conservation in Archives. International Symposium. Ottawa, Canada, May 10-12, 1988*, 273-80. Paris: International Council on Archives, 1989.

Provides sources of technical assistance

to promote occupational health and safety for archivists and conservators. Includes databases and print sources.

Pence, Cheryl. "Audiovisual Resources on Preservation Topics." *American Archivist* 53 (Spring 1990): 350-54.

Reviews audiovisual programs on preservation-related topics.

"Preservation and Reproduction of Records." *Association for Recorded Sound Collections (ARSC) Journal* (Fall 1990): 335.

Association for Recorded Sound Collections (ARSC) bibliography on playback of 78s, compact discs, Edison recordings, and microgroove recordings.

Saretzky, Gary D. "Recent Photographic Conservation and Preservation Literature." *Picturescope* 32 (Fall 1987): 117-32.

de Torres, Amparo R., editor. *Collections Care: A Selected Bibliography*. Washington, D.C.: National Institute for the Conservation of Cultural Property, 1990. 119 pp.

Walch, Victoria Irons. "Checklist of Standards Applicable to the Preservation of Archives and Manuscripts." *American Archivist* 53 (Spring 1990): 324-38.

Useful and comprehensive checklist of standards relating to the preservation of archival records and manuscripts.

CURRENT INFORMATION SOURCES

Publications

The following titles target archival issues and preservation. These sources do not focus primarily on librarians and museum personnel, but on issues that concern these individuals.

Abbey Newsletter: Bookbinding and Conservation

Abbey Publications
320 E. Center Street
Provo, Utah 84606
Phone: (801) 373-1598
Fax: (801) 375-4423

Covers all aspects of archives and library preservation. Issued eight times a year; subscriptions are on a calendar year. New subscribers automatically receive all issues published in the current year unless they request otherwise. Individual subscriptions, \$37; institutions, \$45; full-time students and paid interns, \$20.

Alkaline Paper Advocate

Abbey Publications
320 E. Center Street
Provo, Utah 84606
Phone: (801) 373-1598
Fax: (801) 375-4423

Provides timely information on issues relating to permanent paper. Issued six times a year; subscriptions are on a calendar year. An index of the previous year is sent out the first quarter. Individual subscriptions, and uncomplicated institutional subscriptions, \$30; full-time students, \$20; others \$40. All issues are in print and indexed.

American Archivist

Society of American Archivists
Suite 504
600 S. Federal Street
Chicago, Illinois 60605
Phone: (312) 922-0140
Fax: (312) 347-1452

Journal (published quarterly) and *SAA Newsletter* (published six times per year) are available through membership in the Society of American Archivists (SAA).

American Institute for the Conservation of Historic and Artistic Works (AIC)

Suite 340
1400 16 Street, N.W.
Washington, D.C. 20036

Phone: (202) 232-6636

Fax: (202) 232-6630

Professional organization for conservation practitioners. Members receive a bi-monthly newsletter and a semiannual journal. Fellows, \$100; associate and professional associate members, \$85; institutions, \$130; students and retirees, \$30. Back issues available. Copies of *AIC Book and Paper Group Annual* and *Topics in Photographic Preservation, AIC Photographic Materials Group* are also available through the AIC.

American Association for State and Local History (AASLH)

Suite 202

172 Second Avenue

Nashville, Tennessee 37201

Phone: (615) 255-2971

Publishes a number of technical reports and leaflets relating to archives preservation.

Archival Issues (formerly *The Midwestern Archivist*)

Kevin Leonard, MAC Secretary/Treasurer

University Archives

Northwestern University

Evanston, Illinois 60208-2300

Semiannual journal published by the Midwest Archives Conference (MAC). MAC members receive the journal and the *MAC Newsletter*. Individual subscriptions, \$12; institutions, \$20. Single issues of the journal are available for \$3.50 plus postage and handling. Index to volumes 1-8 (1976-83) are available at single-issue price.

Archivaria

Association of Canadian Archivists

P.O. Box 2596

Station D

Ottawa, Ontario

Canada K1P 5W6

Phone: (613) 830-9663

Journal published semiannually by the Association of Canadian Archivists. \$35, U.S.

individual subscribers; \$40, Canadian individual subscribers; institutional memberships, \$45 U.S., \$50 Canadian. Membership also includes the *ACA Bulletin*.

Archives Library Information Center (ALIC)

Room 201

National Archives and Records Administration

Washington, D.C. 20408

Phone: (202) 501-5415

Produces bibliographies that are available on request, free of charge.

Archives and Manuscripts

Secretary

Australian Society of Archivists, Inc.

P.O. Box 83

O'Connor ACT

2601 Australia

Quarterly journal of the Australian Society of Archivists. Available to nonmembers for \$40 (Australian) per year.

Archives and Museum Informatics

David Bearman, Managing Editor

Archives and Museum Informatics

5501 Walnut Street

Pittsburgh, Pennsylvania 15232-2311

Phone: (412) 683-9775

Fax: (412) 683-7366

Quarterly *Newsletter* contains updates on uses of automated techniques in archives and museums. *Technical Reports* assess specific technologies for use in archives and museum management. Subscriptions to *Newsletter*, individuals \$40, United States and Canada; \$50, overseas. Institutions pay \$80, United States and Canada; \$90, overseas. *Technical Reports* are available by standing order and are individually priced.

Art and Archaeology Technical Abstracts (AATA)

AATA Editorial Office

Getty Conservation Institute

4503 Glencoe Avenue

Marina del Rey, California 90292

Phone: (213) 822-2299

Fax: (213) 821-9409

Principal index to the technical and scientific literature of conservation and related fields. Includes information on archives and library materials and also covers exhibition techniques, environmental control, documentation practices, health and safety, and so on. Published semiannually. Formerly *IIC Abstracts* (1955-65). International Institute for Conservation members receive AATA free of charge. Nonmembers may purchase current and back issues for \$75 per volume. The cost to institutions is \$125 per volume.

Art Hazards News

Center for Safety in the Arts

Suite 1030

5 Beekman Street

New York, New York 10038

Phone: (212) 227-6220

Covers such topics as hazards, precautions, government regulations, and others. Published five times per year. Subscription rates: \$21, United States; \$23, Canada and Pan American countries. Sixteen datasheets on museum and conservation hazards.

Association of Moving Image Archivists (AMIA)

AMIA Secretariat

The National Center for Film and Video Preservation at the American Film Institute
P.O. Box 27999

2021 North Western Avenue

Los Angeles, California 90027

Phone: (213) 856-7637

Fax: (213) 467-4578

Focuses on the preservation and administration of moving image materials. Membership includes the *AMIA Newsletter*, published quarterly. Individual membership \$50; \$150 for nonprofit institutions.

Association for Recorded Sound Collections (ARSC)

ARSC—Membership

P.O. Box 10162

Silver Spring, Maryland 20914

Phone: (301) 593-6552

Organization for collectors, librarians, and archivists with an interest in recorded sound materials. Membership includes a quarterly *Newsletter* and the *ARSC Journal*, published twice a year. Subscription membership is \$30 for individuals.

Canadian Center for Information and Documentation on Archives (CCIDA)

National Archives of Canada

Room 182

395 Wellington Street

Ottawa, Ontario

K1A 0N3 Canada

Phone: (613) 996-7686

An information service producing archival science bibliographies and database information.

Canadian Conservation Institute (CCI)

1030 Innes Road

Ottawa, Ontario

Canada K1A 0C8

Phone: (613) 998-3721

Offers a variety of technical bulletins, newsletters and offprints of articles written by CCI scientists and conservators. A number of very useful publications on photographic materials are found in *CCI Notes*. Most publications are supplied free of charge, by request.

Commission on Preservation and Access

Suite 740

1400 16th Street, N.W.

Washington, D.C. 20036-2217

Phone: (202) 939-3400

Fax: (202) 939-3407

Publishes a monthly newsletter highlighting commission activities and concerns. Subscriptions are free. Complimentary copies of special reports are distributed when published.

Conservation Administration News (CAN)

McFarlin Library
University of Tulsa
600 South College Avenue
Tulsa, Oklahoma 74104
(918) 631-3800

Provides general information about preservation activities in libraries and archives. Published quarterly. Subscription price is \$24.

Friends of the Dard Hunter Paper Museum
4517 Penn Avenue North
Minneapolis, Minnesota 55412
Phone: (612) 588-7900
Fax: (612) 296-9961

Offers information on paper, papermaking history, and allied crafts. Subscriptions, United States, Canada, and Mexico, are \$25 for individuals, \$60 for institutions. Overseas rates are \$33 for individuals and \$76 for institutions. Subscription includes three issues of the *Bull and Branch Newsletter* and a *Journal* that currently is published annually.

IMC Journal
International Information Management
Congress
345 Woodcliff Drive
Fairport, New York 11450
Phone: (716) 383-8330

Offers micrographic and imaging information. Bimonthly publication of the International Information Management Congress. Nonmembers, \$90.

Infinity: Newsletter of the SAA Preservation Section

SAA Preservation Section
c/o Society of American Archivists
600 S. Federal Street
Suite 504
Chicago, Illinois 60605
Phone: (312) 922-0140
Fax: (312) 347-1452

Presents timely information of interest to the archives preservation community. Is-

sued three times per year. Free to members of SAA's Preservation Section.

Inform: Magazine of Information and Image Management

Association for Information and Image
Management
Suite 1100
1100 Wayne Avenue
Silver Spring, Maryland 20910
Phone: (301) 587-8202
Fax: (301) 587-2711

Monthly publication covering applications of micrographics, optical and computer technology, and systems. Subscription for the magazine: \$85 domestic, \$105 foreign.

Information Standards Quarterly
National Information Standards Organization
P.O. Box 1056
Bethesda, Maryland 20827
(301) 975-2184

Provides updates on standards issues. A quarterly publication free to NISO members. Nonmembers may subscribe for \$40, United States; \$50 foreign.

International Council on Archives Publications (ICA)
Klaus Oldenhage
Commerzbank, D-0-1560
Potsdam, Germany

Archivum
Journal of record of the International Council on Archives. Published annually. Provides complete proceedings of the quadrennial conferences of the ICA and special topic issues.

Bulletin
Newsletter of the International Council on Archives; published twice per year.

Janus
Professional journal of the International Council on Archives; published twice per

year. Intended to replace the occasional publications and newsletters of ICA bodies.

Publications available through \$50 individual or institutional membership in ICA.

International Institute for Conservation (IIC)
6 Buckingham Street
London WC2N England.
Phone: (71)-8395975

Publishes *Studies in Conservation* quarterly, the *IIC Bulletin* six times per year, and *Art and Archaeology Technical Abstracts* (see above). Write for current membership information.

Journal of Imaging Technology
Society for Imaging Science and Technology
7003 Kilworth Lane
Springfield, Virginia 22151
Phone: (703) 642-9090
Fax: (703) 642-9094

Focuses on imaging technologies and related fields. Formerly the *Journal of Applied Photographic Engineering*. Bimonthly publication. U.S. subscription, \$80; foreign, \$90.

Journal of the Society of Archivists

Dr. P. Durrant
Berkshire Record Office
Shire Hall
Shinfieldpark
Reading Berkshire
RG2 9XD England

Published quarterly. Annual nonmember subscription, \$22 U.S.

Library and Archival Security

The Haworth Press, Inc.
10 Alice Street
Binghamton, New York 13904-1580
Phone: (607) 722-5857

Published quarterly. Individual subscriptions, \$36; institutions, \$90.

McKay Lodge Conservation Report

McKay Lodge Fine Arts Conservation
Laboratory, Inc.

10915 Pyle-South Amherst Road
Oberlin, Ohio 44074

Focuses on conservation concerns. Published semiannually and is free to collections and preservation professionals on request. Individual and multiple copies available.

NAGARA Clearing House Newsletter

Virginia State Library and Archives
11th Street at Capitol Square
Richmond, Virginia 23219
Phone: (804) 786-5634
Fax: (804) 225-4608

Quarterly newsletter published by the National Association of Government Archives and Records Administrators. Individual membership, \$40.

National Archives Technical Information Papers

National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161
Phone: (703) 487-4650
Fax: (703) 321-8547

Provides information of great interest to individuals working in the archives field.

National Fire Protection Association

Batterymarch Park
Quincy, Massachusetts 02269
Phone: (800) 344-3555

Publications on fire prevention for libraries, archives, and museums.

The Paper Conservator/Paper Conservation News

Secretary, Institute of Paper
Conservation
Leigh Lodge
Leigh, Worcestershire
WR6 5LB England
Phone: 886-32323

Focuses on paper conservation issues.

Journal and *Newsletter* are available through membership: (Overseas) Full members, \$76; student members, \$50; corporate members, \$152.

Picturescope

Formerly the quarterly *Journal* of the Picture Division, Special Libraries Association. Ceased publication in 1987. Microfilm available through University Microfilms.

Phone: (800) 521-0600

Provenance

Society of Georgia Archivists
P.O. Box 80631
Athens, Georgia 30608
Phone: (404) 656-2393

Provenance, the journal of the Society of Georgia Archivists, is published semianually. Membership also entitles subscribers to quarterly newsletters. Individual subscription rates are \$15; institutions, \$20.

Restaurator: International Journal for the Preservation of Library and Archival Material

Munksgaard International Publishers
35 Norre Sogad
Postbox 2148
DK-1016
Copenhagen K, Denmark

Contains general and technical articles on archives preservation. Published quarterly. Current subscription price \$95.79, payable in advance. Prices subject to exchange-rate fluctuations.

UNESCO Publications

Division of the General Information
Programme
Place de Fontenoy
75700 Paris, France

For copies of previously published materials contact:

Frederic J. Glazer
West Virginia Library Commission
Cultural Center

Charleston, West Virginia 25305

Phone: (304) 348-2041

Fax: (304) 348-2044

Produces the *RAMP* publications on records and archives management topics, and other useful publications relating to archives and archives preservation.

Electronic Bulletin Boards and Conferences

Archives

General archival issues, including preservation. To subscribe, send a message to LISTSERV@INDYCMS.bitnet and make the first line of the message: SUBSCRIBE Archives YourFirstname YourLastname

Conservation DistList

An electronic forum for those professionally involved with the preservation of library, archives, and museum materials. Discussions cover a wide range of technical, ethical, and administrative issues. Participants include conservators, archivists, conservation scientists, librarians, and curators. The *DistList* makes available the *ConsDir*, a directory of electronic mail addresses for preservation professionals and *FileList*, a distribution service for text files of interest to the preservation community. To participate, send your electronic mail message to Walter Henry (consdist-request@lindy.stanford.edu), who will send you a brief questionnaire.

ExLibris

Concentrates on rare book, manuscripts, and special collections issues, such as preservation. To subscribe, send a message to LISTSERV@RUTVM1.bitnet and make the first line of the message: SUBSCRIBE EXLIBRIS YourFirstname YourLastname

Libpln-L

Deals with library planning and construction. Discussions cover environmental control, shelving, security, and other such

issues. To subscribe, send a message to `LISTSERV@QUCDN.bitnet` and make the first line of the message: `SUBSCRIBE Libpln-L YourFirstname YourLastname`

Museum-L

Aimed at museum professionals, comprising a diverse group. Issues discussed may be of interest to archivists. To subscribe, send a message to `LISTSERV@UNMVM.bitnet` and make the first line of the message: `SUBSCRIBE Museum-L YourFirstname YourLastname`

PACS-L

Theoretically deals with Online Public Access Catalogs (OPACS), but discussions actually cover all aspects of automation. May be of interest to those involved with reformatting and nonprint media. To subscribe, send a message to `LISTSERV@UHUPVM1.bitnet` and make the first line of the message: `SUBSCRIBE PACS-L YourFirstname YourLastname`

RLG Listservs

These listservs are designed to support Research Library Group's (RLG) programs and are considered a benefit of membership in the Research Library Group. Membership is open to any nonprofit institution with an educational, cultural, or scientific mission and includes research libraries, archives, museums, scholarly societies, and funding agencies.

RLGPRES discusses preservation topics ranging from repair to digital reformatting. Contact: Nancy Elkington and Patti McClung.

RLGAMSC includes discussion of all aspects of the management of archives and special collections. Contact: Alan Tucker. *PREFIS*, beginning in 1992, will be RLG's on-line preservation reformatting information service, devoted to technical and bibliographic aspects of preservation reformatting.

Databases

This section is designed to introduce the archivist to potential resources accessible through databases. Because many database projects are experimental, concise information about database function or content is sometimes difficult to obtain. Listed below are some standard database sources of promising interest to archivists and preservation personnel. Contacts have been included for additional information about these resources.

Archives Library Information Center (ALIC)

Holdings of archival and records management literature. Database of the National Archives and Records Administration. Contact:

National Archives and Records Administration
Washington, D.C. 20408
Phone: (202) 501-5415

Canadian Centre for Information and Documentation on Archives (CCIDA)

Holdings of archival and records management literature. Database of the National Archives of Canada. Contact:

National Archives of Canada
396 Wellington Street
Ottawa, Ontario
K1A 0N3
Phone: (613) 995-5138

Conservation Information Network (CIN)

This database network is administered by the Getty Conservation Institute (GCI) and the Canadian Heritage Information Network (CHIN). CIN provides access to several databases; those that may be of interest to archivists are listed below. For access or additional information contact:

Conservation Information Network
Journal Tower South, 12th Floor
365 Laurier Avenue West
Ottawa, Ontario
K1A 0C8

Phone: (613) 992-3333

Bibliographic Database of the Conservation Information Network (BCIN).

BCIN is a collaborative project of the following organizations:

- The Canadian Conservation Institute (CCI)
- The Conservation Analytical Laboratory of the Smithsonian Institution (CAL)
- The International Center for the Study of the Preservation and Restoration of Cultural Property (ICCROM)
- The International Council on Monuments and Sites (ICOMOS)
- The Getty Conservation Institute (GCI)

BCIN is a bibliographic compilation of its members' holdings. It contains holdings of the ICCROM library in Rome, the world's largest collection of materials relating to conservation, as well as the on-line holdings of *Art and Archaeology Technical Abstracts* (AATA). AATA is an abstracting and indexing service, published since 1983 by the Getty Conservation Institute and the International Institute for the Conservation of Historical and Artistic Works (IIC). BCIN contains AATA citations from the early 1950s to the present.

Materials Database of the Conservation Information Network (MCIN).

Contains technical data about material and solvents used in conservation.

PHOCUS

An automated database from the Picture Conservation Division of the National Archives of Canada. Provides information on the preservation of microfilm, fiche, historical still photographic negatives and prints, motion picture film, and related materials.

The Suppliers Database (ACIN)

Provides a list of predominantly North American and European suppliers for ma-

terials used in conservation. Includes addresses, telephone numbers, fax numbers, and other information for contacting suppliers.

DIALOG

A commercial database vendor, providing on-line access to publications and information services. Among the databases of interest to archivists are the following:

Historical Abstracts (file no. 39)

Index of world's periodical literature and related social sciences and humanities.

America: History and Life (file no. 38)

Comprehensive file indexing and abstracting of the full range of U.S. and Canadian history, area studies, and current affairs literature.

Arts and Humanities Search (file no. 439)

International multidisciplinary database corresponding to Arts and Humanities Citation Index. Covers 1,300 of the world's leading arts and humanities journals and relevant social and natural sciences journals.

Library and Information Science Abstracts [LISA] (file no. 61)

Covers field of library and information science and related areas.

Paperchem (File nos. 240 and 840)

Comprehensive database covering international patent and journal literature related to pulp and paper technology.

Searching strategies are also available to search multiple databases in DIALOG (DIALINDEX/OneSearch categories):

HUMANIT searches many databases for information pertaining to the humanities.

INFOSCI searches numerous databases

relative to library and information science.

Contact DIALOG (Knight Ridder) at (800)-3-DIALOG to request additional information. There is a one-time \$45 membership fee that provides access to over 425 databases. Search charges vary according to database.

Research Libraries Information Network (RLIN)

Includes 50 million cataloging records for books; serials and their contents; musical scores; sound recordings; archival collections; maps; computer files; visual materials, such as films and photographs; and art sales catalogs.

Preservation MasterFile on CD-ROM is a compilation of all records for preservation master microforms in the RLIN database, the richest source for preservation records in the world. It is updated twice annually, published jointly by the Research Libraries Group and Chadwyck-Healey.

Art and Architecture Thesaurus (AAT). May be useful for describing artifacts and documents; is available through RLIN.

Contact

Research Libraries Group, Inc.
1200 Villa Street
Mountain View, California 94041-1100.
Phone: (415) 962-9951