Infinity
The newsletter of the SAA Preservation Section
Summer 2008, Volume 23, number 2

NEWSLETTER HIGHLIGHTS:

FROM THE CHAIR

Dear Colleagues:

To all of you who will be in San Francisco for the SAA 2009 meeting, I hope you have marked on your calendar the Preservation Section Business Meeting, which will be held on Friday, August 29 from noon-2:00 p.m.

After business is completed, the meeting will segue into a discussion on "The Drive to Digitize" during which Kathleen Williams, Thomas F.R. Clareson, Kaye Lanning Minchew, Susan Malbin, and Joel Wurl will present their views on digitization's impact on preservation programs and on preservation funding. Following these comments, section members are encouraged to ask questions of the panelists in order to broaden and extend the topic.

Beginning immediately following the business meeting, Section committees will gather and meet till 3:00. If you are interested in becoming involved, or just learning more about these committees—Education, Programs, Newsletter, Web, Publications, Outreach—I urge you to stick around for this last hour.

I look forward to seeing you in San Francisco.

Brenda Gunn
Preservation Section Chair, 2007-2008

FROM THE EDITOR

Dear Preservation Colleagues:

As we gear up for the 2008 SAA Annual Meeting in San Francisco, the issues raised in this edition of *Infinity* are meant to augment discussions on preservation and pose questions for our collective future as archivists. "Going Green" in archives is something we've been talking about as a profession in addition to our digital preservation initiatives. Looking to the 2009 meeting in Austin, Texas which focuses on sustainable archives, I hope that we -- as a section and as a profession -- will continue to raise questions about environmental and digital concerns in preservation.

I want to take a moment to congratulate our newly elected Section Committee Members and thank all those who were willing to step up and take a leadership role in SAA's Preservation Section. I kow I speak for all of us on the Section Committee when I say we are grateful for everyone's hard work over this past year.

A special thank you, also, to those who contributed to this abbreviated pre-conference edition of *Infinity.* I hope that the Annual Meeting will raise topics for our next issue and that the submissions will come pouring in! Please send submissions to me at *tsutherland@library.umass.edu*.

See you in the beautiful city of San Francisco!!

Safe travels,
Tonia Sutherland
Editor, ***Infinity***

MBLC Recognized for Preservation Work

by Celeste Bruno

The Massachusetts Board of Library Commissioners (MBLC) is pleased to announce that it is being honored with the 2008 Award for Outstanding Commitment to the Preservation and Care of Collections, given jointly by the American Institute for Conservation of Historic and Artistic Works and Heritage Preservation.

"Preserving our library collections ensures that generations to come will benefit from our cultural heritage," stated Gregor Trinkaus-Randall, Preservation Specialist at the MBLC. "I'm pleased that our work in building a strong statewide preservation program for libraries and archives over the past two decades has been recognized by these prestigious organizations."

The Awards Committee commended the MBLC's Emergency Assistance Program to assist organizations in disasters and its work with the Northeast Document Conservation Center to develop *dPlan*: *The Online Disaster Planning Tool*. The MBLC also works with the Massachusetts Emergency Management Agency to emphasize the need to include cultural resources in emergency preparedness activities at the local, regional and state levels.

The committee also recognized the MBLC for spreading preservation services and funding throughout the Commonwealth. The MBLC has taken a leadership role in the development of the statewide Environmental Monitoring Program and has created a preservation grant program using Library Service and Technology Act funds.

"Massachusetts is rich in history," stated MBLC Director Robert Maier. "We're glad to have a role in preserving collections and making them accessible to people across the country and the world."

The MBLC is one of two recipients of the 2008 award; the other recipient is the Arizona State Museum. Previous recipients include Colonial Williamsburg, the National Archives, Museum of Natural History, the Henry Ford, the Museum of Fine Arts, Boston, and Henry Francis du Pont's Winterthur. Representatives from the American Institute for Conservation of Historic and Artistic Works and Heritage Preservation will travel to Boston to present the award to the MBLC.

The Board of Library Commissioners is the agency of state government with the statutory authority and responsibility to organize, develop, coordinate and improve library services throughout the Commonwealth. The Board advises municipalities and library trustees on the operation and maintenance of public libraries, including construction and renovation. It administers state and federal grant programs for libraries and promotes cooperation among all types of libraries through regional library systems and automated resource sharing. It also works to ensure that all residents of the Commonwealth, regardless of their geographic location, social or economic status, age, level of physical or intellectual ability or cultural background, have access to essential new electronic information technologies and significant electronic databases.

Charity Hospital, 1955

Louisiana State Archives Assists in the Preservation of New Orleans Charity Hospital's Historical Treasures

by Florent Hardy
State Archivist and Director, Louisiana State Archives

Charity Hospital was established for the poor in 1736 by Jean Louis, a New Orleans sailor and boat builder. He felt bad that the sick and poor were always turned away from the hospital so he built a place where they could receive medical treatment. The original hospital had no official connection with the government and therefore was mainly supported by colonists. At the time, it was the only hospital in the New Orleans area available to the hundreds of needy patients. Since 1736, Charity has been housed in six different structures and four different locations. The first structure was located at Chartres and Bienville Streets. The second and third structures were located at the edge of town on Basin Street. The fourth and fifth structures were built on Canal Street, and the current structure is found on Tulane Avenue.

In 1874 Warren Brickell, the former dean of the New Orleans School of Medicine, gathered together a group of former colleagues and young, able physicians and organized the Charity Hospital Medical College. In the 1970's Charity Hospital and Tulane University began working together. Because of the demand for a university hospital, the two agencies began negotiating a merger. Unfortunately negotiations fell through. Charity Hospital, however, remained the most prominent medical teaching hospital and continued to be used for clinical experience by both the medical schools of Tulane University and Louisiana State University.

Prior to Hurricanes Katrina and Rita in 2005, Charity Hospital was the second largest hospital in the United States, and employed approximately four thousand employees. It had seven hundred licensed beds and an annual admission of approximately twenty-six thousand with over three hundred thousand annual outpatient visits. The annual emergency room visits totaled one hundred thirty-five thousand and produced revenues of more than $431 million. Its economic impact on New Orleans was an impressive $939 million. Indeed, Charity Hospital in New Orleans had cared for millions of patients and boasted on its staff which included many of the best doctors and nurses anywhere. It truly was a national landmark.

Charity Hospital was severely affected by Hurricane Katrina. The most tragic natural disaster in the nation's history left in its wake more than sixteen hundred dead, one million displaced, two hundred thousand Gulf Coast homes destroyed and over $150 billion in damage. Because of its location, Charity Hospital was not spared Katrina's wrath. In fact, it suffered extensive water damage and electrical problems which has caused it to be left vacant for the past three years. Currently, as a result of the

extensive damage, LSU is making plans for a new facility. In order to achieve the goal of construction of a modern medical facility, the current structure of Charity will need to be replaced. Preservation groups are now working to save the current facility and protect it from continued deterioration.

In May of 2006, Louisiana State Archives staff received a call from staff of the LSU Health Services which administers Charity Hospital requesting assistance with the preservation of items remaining in Charity Hospital. This included the urgent request for temporary storage of irreplaceable items collected during Charity Hospital's long history. The concern was to prevent further deterioration of items left in the empty, non-air conditioned facility. In response to the request, State Archives staff members traveled to New Orleans to retrieve items in peril. As a result, numerous items are temporarily housed at State Archives in a climate-controlled environment. These items include portraits, name plates, photographs, an architectural rendering of Charity, a lithograph, and even an ambulance bell. Also included is a bust of former Governor and United States Senator Huey P. Long.

Quick response by Louisiana State Archives staff "to collect, preserve, display and make available those records essential to the reconstruction of Louisiana's colorful history and culture" fulfills its mission and, in the case of Charity Hospital and its dire need, serves as just one of the many examples of its proactive archival functions. Established in 1956 by legislative act and housed in a state-of-the-art facility since 1987, Louisiana State Archives serves as "Louisiana's historical jewelry box" and primarily houses historical and archival governmental records. For additional information concerning the Louisiana State Archives, go to www.sos.louisiana.gov/archives.

Charity Hospital, New Orleans

Environmental Monitoring for Preservation in an Archive

by Kim Andrews

All archival collections can benefit from environmental monitoring programs to maximize stewardship of their materials. An independent environmental monitoring system is important even in locations in which the environment is centralized and automated. The monitoring system acts as a first indicator in the event there are malfunctions of the central environmental control system.

The parameters that should be monitored over time are:

- Temperature
- Relative humidity (RH)
- UV light
- Visible light

Ideally, temperature for paper-based collections should be maintained between 60 and 65 degrees F. RH should be maintained between 45 and 50%. UV light levels should ideally not exceed 75 microwatts per lumen and visible light levels should be maintained at about 50 lux.

Temperature and RH

The most important requirement for all collections is ***the maintenance of stable relative humidity and temperature***. Dramatically fluctuating temperature and RH cause uncontrolled expansion and contraction of collection materials and lead to their too-rapid physical degradation from these effects. Raised temperature and RH levels also increase the effect of other agents of degradation.

When ambient RH and temperature fluctuates frequently, mechanical recording equipment can lose accuracy. Mechanical equipment should be checked more frequently under these conditions, at least once a week for correct operation, with a calibration check every month and a full service annually. Mechanical instruments should be handled carefully because movement can also affect their accuracy. Calibration of some monitoring instruments is best done in-house, preferably in place, using a reference instrument like a hair hygrometer or a sling psychrometer. RH sensors on electronic instruments should always be checked before use. RH calibration is difficult and an inexact science.

Light

UV and visible light levels should be recorded at different times of day and night and electric fixtures and unshaded windows must be monitored to ensure UV-filtering films are functioning. Light measuring equipment should be calibrated at least annually by being sent back to the manufacturer. One reference meter can be sent for calibration and used to calibrate other instruments.

Daylight must be monitored frequently with spot readings to capture light changes caused by weather patterns, time of day and seasonal variation. For exhibits, levels of daylight and electric light should be checked and recorded during installation of exhibits, weekly for the duration, and again before the exhibit is dismantled. This method provides accurate data on the exhibited objects over time.

UV radiation measurements should be conducted whenever a lighting installation is altered and every six months if filters are applied to windows, to ensure that UV filtration remains satisfactory.

Purpose of Monitoring

The length of time for a monitoring program depends on the purpose. An institution may want to conduct a preliminary survey to develop a snapshot of environmental conditions. Ideally, an institution can develop a long-term monitoring program to capture data that represents the collection environment over a long period of time. It is advisable to collect data over twelve months so that seasonal changes can be correlated to shifts in the interior environment.

Monitoring for temperature, RH, UV light and visible light over the course of twelve months gives an accurate representation of the conditions for collections and provides a sufficient amount of data to plan and institute changes in heating, cooling, humidifying, dehumidifying and lighting.

Environmental monitoring programs are essential in determining necessary changes to be responsible stewards of collections. Even when facilities are well maintained and archivists believe they know the reliability of their environmental systems, many variables can change the environment from safe to harmful for collections.

How Archives Can "Go Green" Responsibly:
Using Alternative Methods for Climate Control in Archives

by Travis L. Puller

Introduction

There has not yet been a concerted effort on the part of the archives professional community, nationally or internationally, to develop, publish, and endorse responsible options to large, central HVAC systems, which are both expensive to design, run, and maintain and are major contributors to green house gases,[1] as the primary method of maintaining the strict climate standards set for archival collections. There are two aspects to the methodology necessary for these kinds of projects: a thorough, critical review of the environmental guidelines for archival materials and a broad, interdisciplinary approach to designing and implementing alternative climate control systems.

Case Study: The Shelburne Museum

In 1992, the Shelburne Museum in Shelburne, Vermont, received a $1.4 million grant from the National Endowment for the Humanities, Division of Preservation and Access, "to design and install practical climate control systems" for several of the buildings that housed collections. In his case study, presented at the conference "From Gray Areas to Green Areas: Developing Sustainable Practices in Preservation Environments" held at the University of Texas, Austin, November 1-2, 2007, Richard Kerschner, Director of Preservation and Conservation at Shelburne Museum, describes his initial approach and several of the various solutions. He knew the strict climate standards cited by the museum profession for his collections,[2] but after surveying his collections and the current literature on climate standards for specific materials,[3] he was able to make more sophisticated decisions about the environmental needs of his particular collections, broadening the acceptable range of temperature and relative humidity.[4] Ernest Conrad, consultant for improving museum environments, surveyed the historic buildings and created a classification (used later in the ASHRAE Handbook: 2003, Chapter 21) that suggested the climate systems that could be used in each class without damaging the structure.[5]

The project began by making small but important improvements to the building shells and surrounding property. Rain gutters and storm drains, insulation, weather-stripping, interior storm windows with UV filtering, and calcium chloride for the dirt roads (to control dust in the air) brought the shells and the interior spaces to their highest passive potential for environmental control,[6] before Kerschner and the engineers, who were working on the project, began to design active systems to supplement the buildings. They designed simple conservation ventilation and/or conservation heating systems for several Class 2 (barn-like) buildings and Class 3(historic house) buildings.[7] Conservation ventilation is the use of large fans to move hot humid air out of a building and drawing cooler drier air through dust filters into the building during the summer months. Conservation heating uses heat to lower humidity levels in the winter. These proved to be quite successful, and Kerschner details how safe rH levels are maintained all year, while temperatures are allowed to fall during the winter (when the museum is closed to the public).

The class 4 building in this case study was the Stagecoach Inn. During the summer months, this building was cooled and dehumidified with air conditioning, but conservation heating was used to control humidity levels

[1] Henry (2007), 13.
[2] Kerschner (2007), 1.
[3] *Ibid.*
[4] *Ibid.*, 2. See especially Kerschner's citation of Erhardt and Mecklenburg (1994).
[5] *Ibid.*, 3-5.
[6] *Ibid.*, 5.
[7] *Ibid.*, 5-8.

in the winter months.[8] During the cold winter months, fans kept the air moving inside the cold building to eliminate interior condensation.[9]

In 2000 the museum began building a new building, the Collections Management Building. It was completed in 2002. Although the original plans were for a barn-like storage building, a second storey library/archive with year-round use was added. The building was heavily insulated in addition to being lined with an aluminized polyester film vapor barrier. The original design was to use conservation ventilation and heating for the first floor storage area and an HVAC system for the second floor. However, because the building was so well insulated, it proved to be impossible to reduce the temperature below 50° F for any length of time before the ground temperature and the heated upper storey raised it back to this level.[10] So the heating and ventilation systems were shut down, and it was found that the temperature and, more importantly, the humidity levels remained steadily in safe ranges, as a result of being sandwiched between the ground and the controlled upper storey and being so well insulated.[11]

Finally, in 2004, conservation heating and direct refrigerant expansion (DX) cooling systems were added to a 3,200 square foot storage building. The building was first insulated with densely packed cellulose, which raised the winter time temperature from 10° F to 40° F just from the ground heat.[12] By using an "undersized" DX air cooling system, it tends to run continuously during the summer, avoiding the intermittent spikes in humidity levels that would occur when a "normal" sized unit is used.[13] The conservation heating system was set to turn on when the interior temperature was below 72° F and the relative humidity rose above 60%.[14] The monitoring data for 2005 showed that (except for a brief equipment failure) the temperatures ranged from 28° F to 80° F and the rH ranged from 42% to 60%.[15]

Steps for Future Projects

- **Monitor climate and record data** for at least one year before designing or implementing a new design, and continue monitoring climate and recording data throughout the change and after the change.

- **Survey collections** for preservation issues and clues to current problems. At this time a plan for segregating materials by medium could be considered if one is not already in place.

- **Know current environmental standards** for specific materials in the collections rather than relying on sweeping (and quite limiting) restrictions on hypothetical, mixed collections.

- **Design the system** with architects**,** climate systems designers and technicians, conservators in other cultural heritage institutions, and any other appropriate experts; and continue to work with them throughout the installation and implementation phases.

- **Separate financial and environmental motivations**, solutions, and costs. While it is often true that reducing energy consumption will save money, the best systems, those that provide consistent protection for the collections while reducing the institution's use of carbon based fuels and reducing their emissions, will not usually be the cheapest to design or install.

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[8] *Ibid.*, 8-9.
[9] *Ibid.*, 9.
[10] *Ibid.*, 12.
[11] *Ibid.*, 13.
[12] *Ibid.*, 15.
[13] *Ibid.*, 16.
[14] *Ibid.*, 15-16.
[15] *Ibid.*, 17.

- **Design a contingency plan** (or two) and set conditions which will initiate a move to that plan in order to safeguard the collections and limit potential damage. A thorough understanding of the environmental needs of the collection, thorough design planning, and effective decision making can keep a failed experiment from becoming a failed archive.

- **Write a case study** with all relevant collection descriptions, monitoring data, design features, and resulting data in a timely fashion regardless of results. Failures are as helpful to future experiments as successes.

Preservation Section Election Results*

SAA Preservation Section 2008 Election

Chair-Elect
Rebecca Hatcher

Steering Committee
Laurie Gemmill

Nominating Committee
Rachel Onuf

*72 participants responded of 904 eligible to respond

Preservation Section Committee (http://www.archivists.org/saagroups/preserv/index.html)

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