Tucked away in Des Moines, Iowa is a small but remarkable collection of books and manuscripts that includes illuminated manuscripts, incunabula, rare Bibles, nineteenth century publishers' bindings, fine printings and bindings from the Arts and Crafts era and first editions of many important writers of the early twentieth century. This collection comprises only a small part of the substantial collections of art, textiles and historic artifacts that adorn the walls and shelves of Salisbury House, a historic home built in the 1920s by Carl and Edith Weeks. This past summer, I had the opportunity to work as a summer intern at Salisbury House to not only provide some much-needed basic preservation care for the book and manuscript collection but also to assist in designing and implementing a plan to protect the collections during ongoing major renovations to the historic building.

The Tudor-style design of Salisbury House was inspired by King's House in Salisbury, England, a building that had delighted Carl and Edith Weeks during their travels overseas. Many of the materials used in the construction of the house including the decorative wood paneling in the library were brought to Des Moines from England and date from the sixteenth and seventeenth centuries. The Weeks' passion for art and literature is evident in the collections found throughout the house. From 1954 until the mid-1990s, Salisbury House served a practical use as
Construction projects in the library were to involve not only the removal of most of the wood paneling both behind and adjacent to the bookshelves in order to allow access to the interior walls, but also the removal of fluorescent light fixtures added above each shelving unit in the latter half of the twentieth century. In order to accommodate the construction and protect the collection, we determined that all 3,000 books would have to be moved out of the library into temporary storage.

Moving all of the books out of the library presented many challenges. The shelf order of the books would have to be carefully documented and fragile books would require special handling and protection to prevent further damage. The Salisbury House staff had selected a room on-site for storing the books during renovations in the library, limiting the potential for loss or damage that might result during a move to off-site storage. The room had fairly stable environmental conditions due to its location in the building and the construction of the heavy rock walls. We hoped that this stability would help to protect the books from potential damage from fluctuations in temperature and humidity while the cooling system in the building was off during renovations.

At this time, we sought the advice of Gary Frost, conservator at the University of Iowa libraries, to develop a detailed plan for packing, moving and storing the collection. Gary recommended using standard file boxes with handles and lift-off lids to store and protect the majority of the books for the duration of the renovations. The relatively small size of the

LBS Adopts Family Evacuated to Des Moines

More than one million 2005 hurricane survivors are scattered across the United States. One of those families who found their way to Des Moines has now settled into their new home. LBS helped them find a place to live and has committed to assisting the family by contributing for a year toward their rent and monthly expenses. LBS employees responded by entirely furnishing and equipping the family’s new home by contributions. Some of the extras—like bikes, toys, gift cards and computers were an added bonus for them.

The mother has started her new job at a day care center and is attending nursing classes at night. A 13-year-old son and 11-year-old daughter are enrolled in middle school. A 7-year-old daughter, who needed to stay in Louisiana for health reasons, has joined her family in Des Moines also attends elementary school. The family dog, cared for by a Des Moines area animal shelter, has also joined the family now that they are settled into their new home. Other family members have come to Des Moines to live as well. The family plans to stay in Des Moines and have expressed their gratitude for all that people here have done for them.

A custom housing constructed for a parchment manuscript with a large wax pendant seal.
boxes, which measure approximately 12" wide by 15" long and 10" deep, would help to limit the weight of each box while still accommodating most book sizes. For large folios and other oversized volumes, Gary recommended packing the books flat in textile boxes. Gary also suggested purchasing polyethylene bags for books with detached boards or other loose pieces and bond paper to wrap books with red rot, delicate finishes or dust jackets.

Although it is unclear whether the current organization of the books in the library is that of Carl Weeks or a later arrangement by the Iowa State Education Association, we decided that maintaining the shelf order of the books was a top priority. The books in the collection, however, have not been catalogued and organized as in a traditional library, so the order on the shelf could easily have been lost without careful documentation. Each individual shelf on each of the sixteen shelving units was assigned a numerical code following a system used in the existing inventory of the collection. This code was used to label each box of books so we would immediately know from which shelf they had been removed. In addition, each shelf was photographed with a digital camera to document the exact order of the books.

Following Gary Frost's recommendations, most of the books were packed on their tails or spines in shelf order. Larger books were stacked flat in the boxes with sheets of B-flute archival corrugated board layered between books for added protection and support. Clean crumpled newsprint was placed around the books to prevent strain on the bindings due to tipping or motion as the boxes were moved. As the books were packed, each box was labeled to indicate the shelf number and the total number of volumes in the box. In addition to the numerical labels, shelf documentation photos were printed and attached to each box so the books could be quickly identified and located as needed while in storage. The boxes were carried downstairs one-by-one and stacked three-high on 2x4 rails. The 2x4s were intended to provide space between the floor and boxes to minimize damage in case of seeping water. In all, the move required 295 boxes, 230 lbs of newsprint and untold amounts of tender loving care.

Once renovations are completed later this year, the books will be removed from storage and reshelved in the library. Our careful documentation should allow the books to be accurately returned to their original shelving order. As the volumes are reinstalled, basic preservation maintenance...
will be performed as needed. The books have received little use in the past ten years and consequently a heavy layer of dust has settled on the shelves and volumes. Many of the books, especially nineteenth century bindings, exhibit typical damage such as broken caps and detached boards. The heads will be carefully brushed or vacuumed as appropriate, minor repairs will be carried out as possible and protective enclosures such as polyester jackets, four-flap wrappers, and drop-spine boxes will be constructed or purchased.

Once the books had been safely moved from the library, I was able to focus the remainder of my time at Salisbury House on the manuscript collection. With very little time available, my goal was to assure that all documents had a minimum level of protection until a complete assessment of the collection can be performed. The collection, which includes manuscripts dating from the twelfth to mid-twentieth centuries, is housed in a single metal flat-file cabinet with four-inch-deep drawers. Most of the manuscripts are mounted to cardstock, encapsulated in Mylar and stored in three-ring binders; however, many fragile and valuable items had been left loose in the metal drawers.

Moving these items into protective housings was one of my top priorities this summer. I found that I could fit Century boxes two-deep in the existing metal cabinet, so I selected these clamshell style boxes in several sizes. Most items were placed directly in 10- or 20-pt custom file folders cut to fit perfectly inside the Century boxes. Light-weight acid-free paper folders were also used to separate multiple manuscript items within the file folders as necessary. Using pre-cut folders and Century boxes allowed me to quickly provide high-quality protective housings to fit in the compact space. A few items, such as a sixteenth century English manuscript with a 4½ inch pendant wax seal, required more complex housings constructed from 20-pt sandstone archival board and B-flute archival corrugated board. In addition, Academy folders from Archival Products were selected for several prized items in the collection so they can be consulted and displayed without removing them from the housing.

With the help of the amazing Salisbury House staff, Gary Frost and a generous donation of materials from Archival Products, I was able to put in place several preventive measures that will protect the Weeks’ family book and manuscript collections during renovations and beyond. Much work remains to be done. It is hoped that with the ongoing cooperation of the Salisbury House Foundation, Gary Frost, Archival Products and future student interns, a long and safe future for the collections can be assured.

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In the Hot Seat: Using Local Resources for Innovative Disaster Training

by Thomas H. Teper

Introduction

Despite the continuing evolution of library preservation, disaster preparedness remains one of the most elementary aspects of any preservation and conservation program. It is also one of the programmatic elements most easily ignored by a library’s staff and patrons. The feeling that “it can’t happen here” prevails and increases likelihood of an institution neglecting its obligations to prepare for the worst. The basic need to prepare a facility and its personnel for disaster response remains a major concern.

The University of Illinois at Urbana-Champaign (UIUC) faces any number of potential disaster situations. Tornadoes and severe storms rage across the Midwest on an annual basis. The institution sits reasonably close to the New Madrid fault and the aging facilities housing the bulk of the Library’s collections are susceptible to any number of age-related disasters. Moreover, given that the Main Library covers 500,000 square feet of floor space, the risk of accidental or purposefully set fires destroying portions of the collection remains a threat.

As the Library’s Emergency Response and Security Task Force completed a new Disaster and Emergency Response Manual in 2004, the need for staff training became apparent. This work fell to the Library’s Preservation Committee. As discussions about the training developed, it became obvious that the library’s personnel as a whole remained unprepared. Many members of the disaster response team lacked basic familiarity with larger issues of disaster response, let alone familiarity with the plan. While everyone agreed on the need for training, the exact format remained undetermined until a Preservation Committee member mentioned the Illinois Fire Services Institute, a unit on UIUC’s campus.

The Illinois Fire Services Institute

Like most states, Illinois supports a fire academy for training or certification of first responders in firefighting, emergency medical response, fire investigation and prevention, hazardous materials, rescue operations and homeland security. Headquartered at the UIUC’s campus, the Illinois Fire Services Institute (IFSI) fulfills this role in Illinois through classroom education, hands-on training and distance education courses. The IFSI campus includes an administrative building with classroom spaces, a firehouse, a fire tower for simulating high rescues, several bunker-like burn sites for simulated fires, parked train cars for hazardous materials response training, simulated collapsed buildings and a number of other prepared facilities. IFSI’s faculty consists of a combination of full-time and adjunct professionals.

Partnering for Success

Although initially met with some hesitance by Preservation Committee members, the possibility of working with IFSI was quickly
embraced as the training possibilities were considered. Working with IFSI’s librarian, the committee arranged for several meetings to present the Library’s needs to IFSI’s administration and tour the facilities. Most importantly, these meetings provided an opportunity to size one another up, evaluate the potential collaboration and determine if the project would prove worthwhile. Within a short time, all agreed that the potential benefits outweighed the Library’s limited budget for this exercise. The Library received support to develop an innovative training program and IFSI would get the opportunity to explore a potential avenue for expanding its mission.

The Classroom Training
Library members and IFSI quickly settled on a schedule that would include classroom training and hands-on exercises. Limiting attendees to those named within the Library’s disaster plan, the training began with a classroom session focusing on library disaster preparedness and response, followed by a presentation by a division fire chief that serves the campus. His presentation focused on a first responder’s role during an emergency with heavy emphasis on saving lives over property and the benefit accrued by developing and sustaining open lines of communication with first responders prior to an emergency.

After this discussion, participants received boxed lunches and viewed a computer-generated walk-through of a Fire Dynamic Simulation of the 2003 Cook County Administration Building produced by the National Institute of Standards and Technology (NIST). The model dynamically illustrated the space in question and included separate time-lapse demonstrations of the spread of fire and smoke through the un-sprinkled site. It then modeled the spread of fire and smoke in the same facility if automatic sprinklers were present.

After lunch, a display of the Library’s disaster response supplies and fire fighting equipment provided participants with an opportunity to acquaint themselves with the tools of the trade and organizers a chance to finalize preparations for the afternoon’s controlled burn and recovery exercise.

The Controlled Burn
The controlled burn focused on illustrating three points—the destructive force of a fire, the results of extinguishing a fire with fire hoses and the preventative role of sprinkler systems. Conveniently, it also provided materials for the afternoon’s final exercise—a recovery exercise and discussion of the difficulty of salvaging materials. Located within a bunker-like structure designed so that observers outside the building could watch a developing fire, the controlled burn provided an opportunity to see how a fire spread, to feel the
intensity of a relatively “cool” fire and to participate in the recovery of materials from a burn situation.

Facilities personnel from IFSI set up two shelving units ten feet apart with thirty books on each of their six shelves. A “grill” was then placed five feet in front of each shelf and piled with a combination of wooden pallets and straw. Finally, a sprinkler stand was placed in front of one grill. Equipped with a fusible link, the sprinkler would react once the elevated temperature triggered it, extinguishing one fire while permitting the other to burn freely for a period of twenty minutes. This period roughly calculated to approximate the estimated time needed from the time a call was received until first responders located a fire within the deepest portions of the campus’ Main Library.

The Controlled Burn’s Results
The most anticipated portion of the day, the controlled burn, provided an opportunity few experience. Yet, it was also dependent upon the most contingencies. Given the cool temperatures and cleanliness of a fire composed of pallets and straw, would the materials burn as expected? If they did catch fire, would there be anything left to salvage after twenty minutes of free burning? What type of smoke damage would result? Moreover, how long would it take to cool the space to enable the salvage exercise to begin?

To obviate some of these concerns, two Preservation Committee members spent a day at IFSI prior to the day of training to pre-burn some items. Intended as a precautionary exercise, the pre-burning ensured that some materials in a variety of conditions remained for the follow-up discussions about on-the-spot priority setting and the salvage exercise. These materials were then placed inside the burn site at a safe distance from the demonstration set for that day.

The material for the controlled burn was set up by IFSI’s staff during the last portion of the classroom exercises. As everyone assembled outside, IFSI staff described the particulars of fire behavior, answered participants’ preliminary questions and provided a brief tour of IFSI’s campus. Then, IFSI personnel lit fires. As the fires consumed the available fuel and smoke began to fill the room, discussion among participants turned to specific questions about what they were witnessing. Of particular interest to many were the smoke’s layering effect and the sudden ignition of the shelved library materials.

Unfortunately, the one major glitch in the training program occurred during the controlled burn. When the sprinkler reacted, it extinguished both fires. While IFSI staff reset one fire to permit the materials on that side of the room to cook further, some of the immediate drama was lost. Yet, the results of the burn exercise could not have been better. Not only did the attendees witness the burn, several actually handled the fire hoses used to extinguish the fire.

As the room cooled from the near 1200-degree temperatures reached during the burn, the participants entered the space. One of the most shocking portions of the session was the wall of humidity that engulfed individuals as they walked into the still steaming room. While everyone intellectually recognized that the room would be humid, the combination of heat, humidity and smoke generated by a relatively clean fire of wood and straw served to drive home the impact of such a disaster. Discussion quickly turned to the library materials—many of which were still too hot to touch. Armed with the knowledge that it might be hours or even days before library personnel would be permitted into a site after a fire, the oppressive humidity and heat provided ample opportunity to discuss the ongoing risk of damage from mold and moisture.
The Fire’s Results

Falling off shelving bowed by heat and scattered on the floor from the force of the fire hose, the library materials in this exercise clearly illustrated a fire’s threat to collections. Some, charred beyond all hope, illustrated the difficulty of recovering a collection from such conditions. While items may be bypassed in an initial salvage, the absence of burned off title pages or barcodes served to demonstrate the difficulty of developing an accurate inventory.

Heavier damage on higher shelves clearly illustrated the fire’s tendency to rise and inspired discussion about fire behavior in the Library’s antiquated hanging stacks. Melted cassette tape cases unveiled problems of recovery and the costs associated with salvaging content from damaged audio-visual resources. Within the short time that passed between extinguishing the fire and re-entering the burn site, even materials with relatively minor damage from the fire had significantly swollen from the moisture.

When the materials cooled enough to permit handling, participants engaged in exercises typical of more common disaster exercises. Discussion about the selection and evaluation of library materials after a disaster, handling and packing wet and damaged materials for freezing or drying, washing materials damaged with a combination of soot and mud and air-drying wet materials composed the final portion of this exercise. Perhaps the most difficult and the most rewarding portion of the exercise was the realization that, in some cases, materials would be damaged beyond all hope of salvage. The potential emotional toll associated with seeing one’s own library—in some cases, one’s life’s work—destroyed became apparent to the attendees. While the total items destroyed during this training process was limited, the training’s purpose—familiarizing individuals with disasters, the amount of labor required to move even small numbers of damaged material and the potential impact of such an event on a campus’ research and educational programs—was clearly articulated.

Conclusion

While disaster training like this may not be possible at all institutions, familiarizing library administrators and disaster response team members with their disaster plan and the potential results of an event remains crucial to the success of an emergency response. The potential for individuals to freeze or retreat from working with such a situation remains high, no matter how well acquainted they are with a printed plan. Engaging these individuals within disaster response exercises and implementing the disaster response plan provide crucial first-hand experience to those with little familiarity with intricacies of disaster response and management. It also provides preservation administrators with an opportunity to vet those selected to fill key roles in the library’s disaster plan.

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