



**A PUBLIC TRUST AT RISK:**  
The Heritage Health Index Report  
on the State of America's Collections

A PROJECT OF HERITAGE PRESERVATION AND THE INSTITUTE OF MUSEUM AND LIBRARY SERVICES

# The Heritage Health Index is the first comprehensive survey

ever conducted of the **condition and preservation needs** of our nation's collections. The project was conceived and implemented by the nonprofit organization **Heritage Preservation** in partnership with the federal **Institute of Museum and Library Services**.

Over 100 leading collections professionals helped develop the survey, which was completed by the staffs of archives, historical societies, libraries, museums, and scientific research organizations, large and small, from every U.S. state and territory.

Over **4.8 Billion Artifacts** are held in public trust by more than **30,000** archives,

These artifacts embody the richness and diversity of our heritage and include rare books and manuscripts, photographs, documents, sound recordings, moving images, digital materials, art, historic and ethnographic objects, archaeological artifacts, and natural science specimens.

historical societies, libraries, museums, scientific research collections, and archaeological repositories in the United States.



This publication presents a summary of the survey results. To read the full report, learn more about the survey methodology, and view the list of institutions that participated in the survey, visit [www.heritagehealthindex.org](http://www.heritagehealthindex.org).

## American museums, libraries, archives, historical societies, and scientific research organizations are visited **2.5 billion times a year.**

Their collections teach and inspire and are vital to sustaining a well-educated and connected citizenry, a thriving tourist industry, and a wealth of knowledge to enrich and enlighten our civilization. **They are a public trust that must be protected for future generations.**

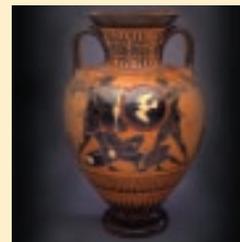
The **Heritage Health Index** found that artifacts in America's collections are at risk and require immediate attention and care, including: **4.7 million works of art**

**13.5 million** historic objects—  
from flags and quilts to  
Presidential china and  
Pueblo pottery

**153 million** photographs

**189 million** natural  
science specimens

**270 million** rare and unique  
books, periodicals,  
and scrapbooks.



Providing a safe environment and **proper care** for **collections** is a **fundamental responsibility** of all institutions and individuals who care about our heritage.

These collections can survive the twenty-first century and continue to enrich the lives of Americans if action is taken now:

- Institutions must give priority to providing **safe conditions** for the collections they hold in trust.
- Every collecting institution must develop an **emergency plan** to protect its collections.
- Every institution must **assign responsibility** for caring for collections to members of its staff.
- Individuals at all levels of government and in the private sector must assume responsibility for **providing the support** that will allow these collections to survive.

# U.S. Collections Are Exposed to Hazards



## Could city life cause the demise of mighty elephants?

At the American Museum of Natural History in New York City, an uncontrolled environment has damaged the hides of the museum's famous elephants. The museum hopes to raise funds to create a stable environment that will protect these impressive but fragile creatures from the harm of polluted air, dust, and fluctuations in temperature and relative humidity.

The Heritage Health Index found that collections are **at risk of damage** because of improper environmental conditions and storage.

**An improper environment can cause irreparable damage.**

**26%** of collecting institutions **have no environmental controls** to protect their collections from damaging effects of temperature, humidity, and light.

**59%** of collecting institutions have had their collections **damaged by light**.

**53%** of collecting institutions have had their collections **damaged by moisture**.

**High humidity** promotes mold growth, corrosion, and degradation, while lack of humidity can cause drying and cracking. Fluctuations between extremes can cause warping, buckling, and flaking.

**All kinds of light**, especially ultraviolet rays from natural and artificial sources, can cause fading and disintegration.

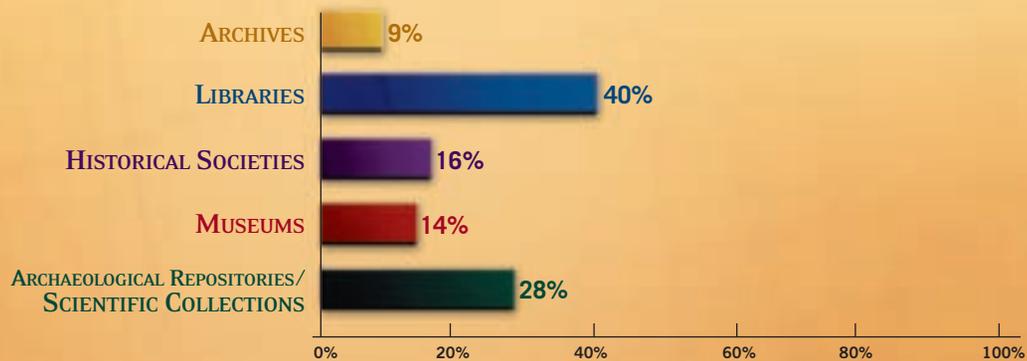
**High temperatures** can accelerate deterioration.

**Pollutants and dust** are abrasive and can accelerate harmful chemical reactions.

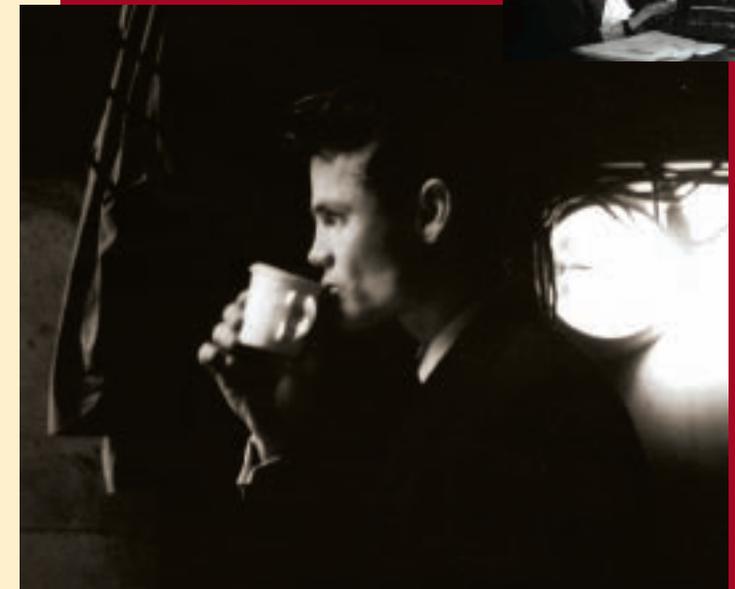
**Pests** can infest and destroy many objects.

The Heritage Health Index found that the most urgent preservation need at U.S. collecting institutions is environmental control.

## Institutions Using No Environmental Controls for the Preservation of Collections

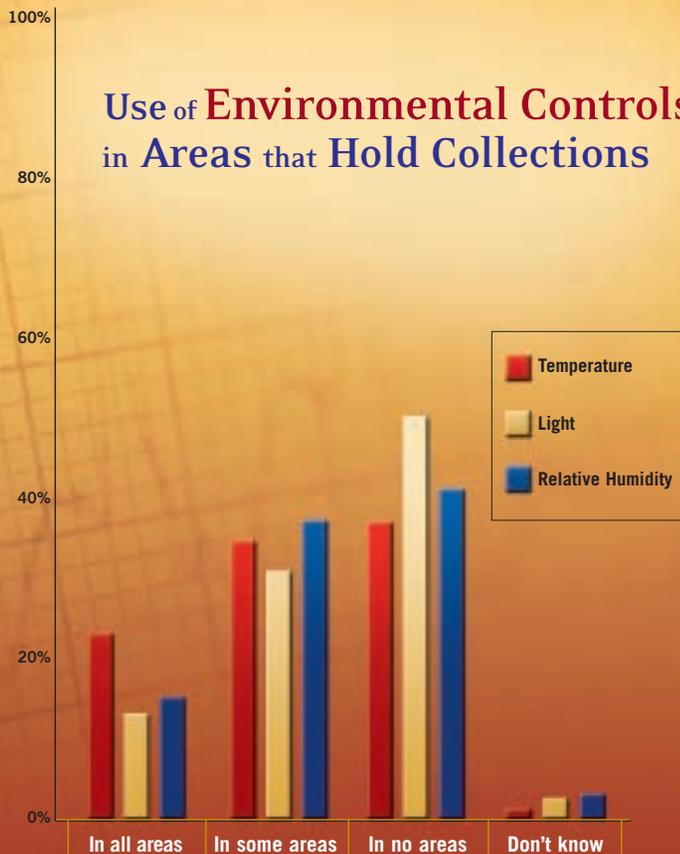


In the mid-twentieth century in Vermillion, South Dakota, photographers from the University of South Dakota recorded important events and daily life, such as these images of jazz legend Chet Baker's visit to Sioux Falls and of the editor of the school newspaper at work.



This treasure trove of over 300,000 negatives, slides, and prints was forgotten and sat for years in proximity to photographic chemicals, leaving it in an advanced state of deterioration and creating a fire hazard. The University's I. D. Weeks Library, with a team of student workers, is placing the collection in proper storage, keeping this irreplaceable record of Great Plains history accessible for future generations.

## Use of Environmental Controls in Areas that Hold Collections



## Perilous Conditions Plague Storage Spaces

**59%** of institutions have the majority of their collections stored **in areas too small to accommodate them safely and appropriately.**

**65%** of our nation's collecting institutions have experienced **damage to collections due to improper storage.**

As safe as it seems to pack collections away, storage facilities can present unanticipated hazards. Many materials are stored in basements, attics, or warehouses that do not have proper environmental controls or are at risk for flooding or overheating. Fragile items are often crammed into drawers or crowded onto shelves where condition problems go undetected and retrieval is risky. Improper containers leach acids and chemicals into their contents, slowly destroying them.

### Collections must be kept in a proper environment,

whether they are exhibited in a gallery, available to researchers in a reading room, or held in storage. **Providing a safe environment for these fragile objects is a fundamental responsibility of every institution.** Capital projects should give priority to protecting collections.



**The last will and testament of Frederick Douglass** is among the original documents held in the District of Columbia Office of Public Records. If the collection is to survive, conditions must improve; the archive is understaffed, has an inadequate budget, and is in a cramped facility lacking environmental controls.

## Security

The Heritage Health Index found that **only 44%** of institutions **have sufficient security measures in place for their collections** and that **26%** report having **no or inadequate protection.**

A unique object lost through theft or vandalism represents a loss of knowledge for future generations.

Appropriate security methods vary with an institution's size and type, ranging from an advanced system of intrusion detection and cameras to staffing a gallery with security personnel to placing magnetic strips in library books.



## Outbreaks of silverfish and book lice

confronted the University of Connecticut's Department of Ecology and Evolutionary Biology, which houses internationally significant collections of preserved plants, insects, birds, fish, mammals, and parasites. Buildings lacked adequate climate control, appropriate storage space, and sufficient security, and a major steam leak threatened to destroy collections. A recently completed state-of-the-art facility features sealed cases, temperature and humidity control, and space for new specimens as the collection grows.



Before



After

## 20th and 21st century materials

### Film, video, and sound recordings

can transport us back in time to experience stirring performances, historic events, or even the bird call of a now endangered species. These materials are susceptible to chemical and physical decay, and lack of working machinery to play them can render them obsolete. The condition of almost half the 86 million film reels, videos, DVDs, records, cassettes, CDs, and MP3s in public collections is unknown, leaving them in probable jeopardy.

### Digital collections on disks, tapes, CDs, and DVDs

contain such materials as online publications, government records, interactive art, and photographs. Institutions have taken responsibility for preserving more than 9 million such physical objects, and the number is growing daily. Extremes of temperature and humidity, magnetic fields, and electrical currents could cause a total loss of data on these media. Digital materials present unique challenges, since content created even a few years ago may become unusable if the correct hardware or software is not available. Moving these materials to formats that can be read by current technology is today's solution, but the field is changing rapidly. The condition of over half the digital materials in U.S. collections is unknown.

### The UCLA Film & Television Archive

is saving irreplaceable film and television like *The Mark of Zorro* (1940).



### The University of South Carolina

Newsfilm Library preserves and makes accessible unique newsreel footage from the Fox Movietone News Collection, such as footage shot by Fox of the attack on Pearl Harbor.



### At the University of Oklahoma,

the Julian P. Kanter Political Commercial Archive cares for approximately 80,000 film, audio, and video recordings of commercials from 1936 to the present, including the controversial Lyndon Johnson campaign ad "Daisy Girl" from 1964.

## Collections Are Vulnerable to Swift and Catastrophic Loss

**80%** of collecting institutions **do not have an emergency plan that includes collections**, with staff trained to carry it out.

**2.6 billion items** of historic, cultural, and scientific significance are not protected by an emergency plan and are at risk should a disaster strike their institutions.

All collections are at risk for catastrophic loss due to disasters ranging from **hurricanes** and **tornadoes** to **floods from broken water pipes**. Institutions that prepare for emergencies dramatically improve the chances that their collections will survive.

Every collecting institution should have an emergency preparedness plan that includes its collections, and staff should be trained to implement the plan.

Numerous resources are available to help institutions prepare written disaster plans that outline who to contact, what to save, and how to train staff to coordinate response and recovery in an emergency. **Institutions must use these guidelines or secure professional services to cover the basics of emergency planning NOW.** Modest commitments of time and resources devoted to preparedness will prove to be enormously cost effective in the event of a disaster.



### A broken hot water pipe flowed unchecked for almost 24 hours

in March 2004 at an off-site storage facility housing archaeological materials from 9,500 BCE through the twentieth century. The collection is held by The Archaeological Research Collections of the New Mexico Museum of Indian Arts and Culture in Santa Fe, New Mexico. Everything stored on the lowest shelves, approximately 1,400 boxes of collections, was immersed in water.



When today's archaeologists explore the museum and university collections so devotedly assembled by their predecessors, they find hundreds of millions of objects and fragments spanning the millennia. Yet **20%** of these remnants of past lives need additional care if they are to survive the century.



### Three nitrate motion picture films ignited a fire in a storage unit

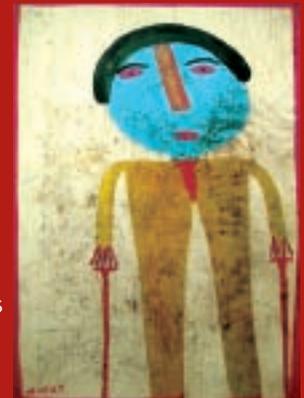
at the Northwest Museum of Arts & Culture in Spokane, Washington, in June 2005. These flammable materials were correctly housed in cold storage, but a malfunction caused the temperature to rise to more than 100°F. Two boxes containing about 300 nitrate-based photographs depicting life in eastern Washington over the last century were destroyed. Response to the fire was hampered by the lack of an updated disaster plan for collections in the museum's new building.

## Institutions with **NO EMERGENCY PLAN** with Staff Trained to Carry It Out



### When Hurricane Katrina roared ashore in August 2005, the Ohr-O'Keefe Museum in Biloxi, Mississippi, sustained serious damage.

Because of an emergency plan, the museum's collection of pottery by artist George Ohr weathered the storm safely in a secure building and was then evacuated to Mobile, Alabama. The museum's nineteenth-century historic frame house, Pleasant Reed, used to interpret African-American life in the early twentieth century, was washed away by the storm surge—only its chimney remains. Work is now underway to salvage library materials, including African-American history texts, hymnals, and photographs that have sustained water and mold damage.





## Twelve thousand pages of Dutch Colonial records, dated from 1638 to 1670,

were among the few documents to escape the disastrous New York State Capitol fire of 1911. In 2000, highly trained paper conservators reinforced the charred edges, ensuring that the documents are stable for use by researchers at the New York State Archives.

## Collections Require Attention and Expertise

**80%** of institutions **do not have paid staff dedicated to collections care.**

**71%** of institutions **need additional training and expertise for staff caring for their collections.**

Trained professionals are essential to the survival of our collected heritage. An experienced conservator can provide expertise on preventing deterioration and knows the proper way to repair a damaged object.

Not every institution has the size or resources to have a professional conservator on staff, but other solutions are available.

Staff and volunteers can avail themselves of opportunities that exist for training, although there is a need for more of these programs. Institutions can also utilize the knowledge and experience of conservators in private practice and at regional conservation centers.

Every institution **must** have staff assigned to such basics of collections care as monitoring conditions and ensuring safe storage, transport, and display.

**39%** of institutions have a **significant backlog in cataloging** their collections.

**70%** of institutions **do not have a current assessment** of the condition of their collections.

Due in part to inadequate staffing levels, basic information about the content and condition of collections is missing in many museums, libraries, and archives.

If no one knows what is in a collection, there is a good chance that at least some of the collection will suffer from neglect. Decision-makers must make cataloging and condition surveys a high priority.

**This flag was presented to Abraham Lincoln on April 11, 1865, three days before his assassination.** At the request of the American Textile History Museum, conservators cleaned the flag and documented areas of damage and weakness. Previous repairs that had disfigured the flag were replaced by unobtrusive state-of-the-art conservation techniques.





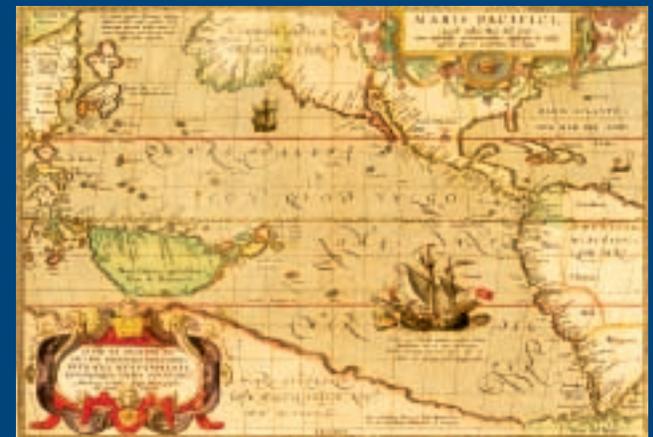
If stacked together, the nation's archival records, manuscripts, and maps alone would extend **from the Mississippi to Maui and back**. One quarter of these fragile paper items need preservation attention.



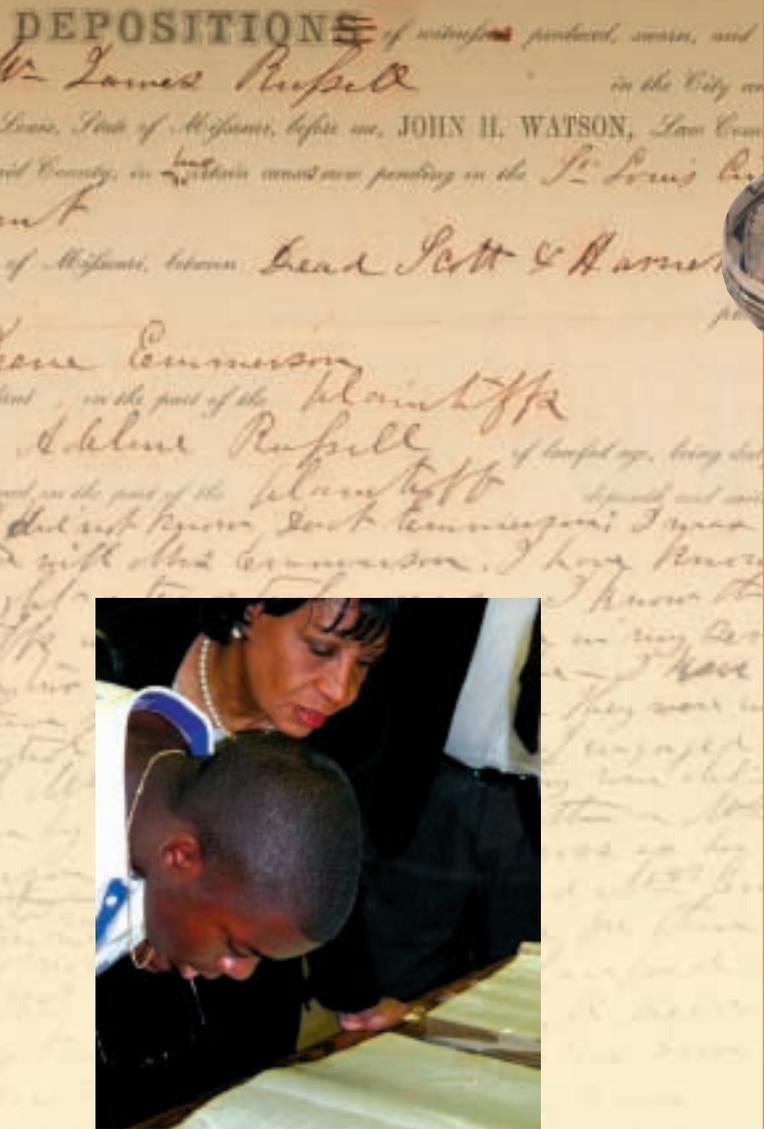
A flash flood carrying mud and debris sent a seven-foot wall of water and mud through the Hamilton Library at the University of Hawaii, Manoa, in Honolulu in October 2004. The force of the flood knocked out walls, broke windows, moved fully loaded map cases, and toppled library stacks. Approximately 110,000 maps were destroyed and 90,000 aerial photographs were severely damaged. Because the library had a disaster plan that included its collections, such rarities as this prized 1589 map, *Maris Pacifici* by Abraham Ortelius, were saved.



Before



After



- The nation's historic collections are of seemingly infinite variety: sets of Presidential china and Pueblo earthenware; George Washington's dentures and a plastic toothbrush sent on an Apollo mission; Civil War regimental flags and toy tin soldiers. The Heritage Health Index found 13.5 million of the 48 million historic objects in public collections to be in danger.



## Did You Know?



- Of the more than 700 million photographs being cared for in the U.S., nearly 153 million photographs, from daguerreotypes to Polaroids, need improved care.

- There are 1.7 billion rare and unique books, periodicals, and scrapbooks in U.S. collections; 16% need improved care and conditions.



- Fifty-two million paper items including stamps, currency, and printed ephemera, such as postcards and baseball cards, are at risk.



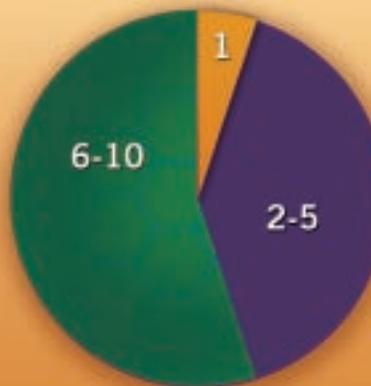
- Nearly a quarter of all the 21 million paintings, sculptures, and works of decorative art in U.S. collections need preservation.

- Americans have always collected plant, animal, and geological life in all its incredible diversity. Today, more than 800 million specimens reside in government agencies, university departments, and museums. Nearly a quarter are in need of care.



In 1999, the Missouri State Archives entered into a partnership with the St. Louis Circuit Court to organize, conserve, and microfilm more than 1.3 million important court documents. The papers include records relating to Dred Scott, whose petition for freedom from slavery became a landmark Supreme Court decision. They have now been preserved and can be displayed to visitors, such as U.S. Representative Maxine Waters and her grandson.

### Most Institutions Care for Multiple Types of Collections



### Collection types:

- ❑ Books and bound volumes
- ❑ Unbound sheets
- ❑ Photographic collections
- ❑ Moving image collections
- ❑ Recorded sound collections
- ❑ Digital material collections
- ❑ Art objects
- ❑ Historic and ethnographic objects
- ❑ Archaeological collections
- ❑ Natural science specimens

The Library at the University of Illinois Urbana-Champaign preserves manuscripts, letters, books, and photographs that belonged to American writer Carl Sandburg. Within this extensive collection are materials on acidic paper that have been saved from rapid deterioration by conservation treatment.



## Millions of objects are in urgent need of treatment or attention

by a skilled, professional conservator if they are to remain available for exhibition and research. Some may not survive without help:

**12.6 million** black and white photographic prints

**2.5 million** scrapbooks, albums, and pamphlets

**2.4 million** botanical specimens

**500,000** works of art on paper

**475,000** textiles

**95,000** pieces of historic furniture



## The artifacts at the Marion County Historical Society in Fairmont, West Virginia, represent the town's long and varied history:

a compass used to survey colonial territory, Civil War artifacts, and postcards depicting the 1907 Fairmont Coal Company mining disaster, the worst in U.S. history. Like many small museums and historical societies across the nation, the museum struggles with imperfect environmental conditions and has never fully cataloged or assessed its collection. Many items were damaged before they entered the collection. Even with limited funding, the museum's staff and volunteers are tackling these projects so their hometown heritage will be preserved.





20 years ago

Decaying fabric threatens the survival of flags from Civil War regiments and North Vietnam and banners from the Nuremberg rallies at the Soldiers and Sailors National Military Museum and Memorial in Pittsburgh. The collection suffered from an improper environment, inadequate storage, and lack of attention by trained professionals. Since the museum's incorporation as a nonprofit in 2000, it has taken steps to address past neglect. While storage has been improved and professional staff has been hired, the museum still lacks funds for conservation treatment and proper housing, which cost from \$5,000 to \$15,000 per flag. Time is of the essence—this silk Civil War regiment flag, intact only 20 years ago, has now disintegrated.



Today

## Preservation Lacks Stable Funding

Fluctuating budgets can be as dangerous to artifacts as fluctuating humidity.

**77%** of institutions **do not specifically allocate funds for preservation** in their budgets.

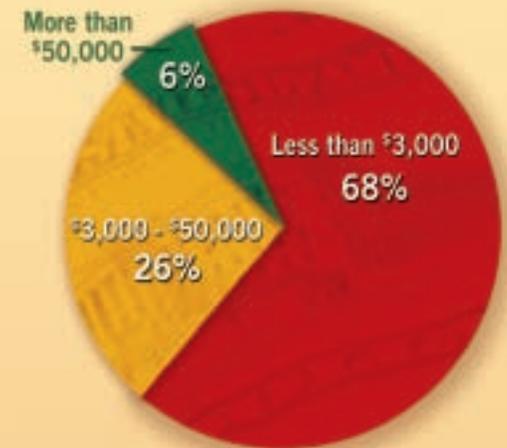
**Only 13%** of institutions **have access to endowed funds for preservation.**

Preservation requires persistence and consistency. Preventive measures keep small problems from becoming expensive ones. Every dollar spent on a safe environment will be repaid many times over as an institution avoids the need for costly treatments. Unfortunately, when funds are scarce, too many institutions defer collections maintenance and leave future generations to suffer the consequences.

Private donors and public officials at all levels must realize that ensuring a future for the nation's collected heritage is a responsibility they share with those who oversee our museums, libraries, and archives. Stable funding must be provided for both the staffing and capital improvements that proper collections care requires.

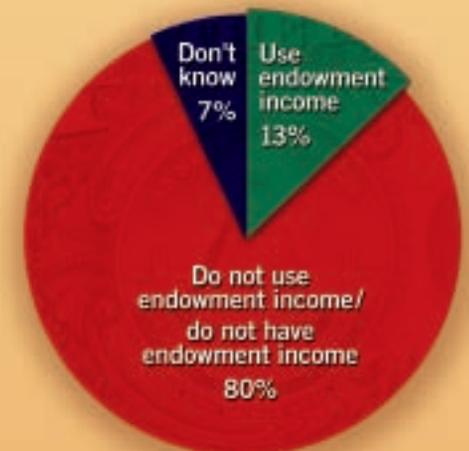
Care of collections need not be a drain on resources. Exposure to conservation can engage the public, encourage participation in an institution, and attract financial support.

### Annual Budgets for Conservation/Preservation - most recently completed fiscal year -



Includes funds for staffing, supplies, equipment, surveys, treatment, preservation reformatting, commercial binding, consultants, contractors, and other preservation costs.

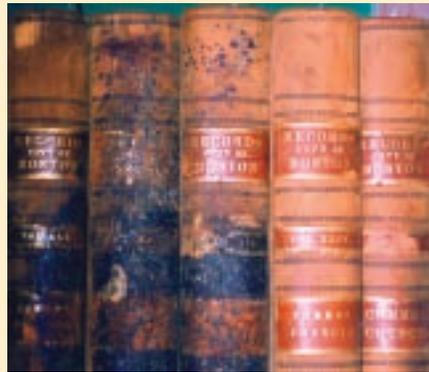
### Use of Income from Endowed Funds for Conservation/Preservation - last three years -





## Conservation projects have been conducted in the galleries of The Minneapolis Institute of Arts

so the public can learn what is involved in conservation. When Giovanni Francesco Barbieri Guercino's *Erminia and the Shepherds*, a massive seventeenth-century masterwork, needed treatment, the gallery became the laboratory. For eight weeks conservators engaged and educated museum visitors about treatment decisions and process, broadcasting their progress with a live Webcam and daily diary entries on the museum's Web site.



## The City of Boston's archives, dating from 1630 to the present,

do not have the consistent preservation and management essential for collections of such historic value. A small number of professional staff working in temporary facilities have cared for some of the most important segments of the archives. However, much remains in City departments, some in inappropriate storage in attics, closets, basements, and garages. Planning for a permanent repository is soon to begin, but tight City budgets mean that adequate human and environmental resources at the new archives building are still not assured.

## When people go behind the scenes, they gain a better appreciation of what collecting institutions do.

The Brooklyn Museum's Luce Visible Storage Study Center and the Logan Museum of Anthropology at Beloit College are examples of places where storage facilities are visible to visitors. When the Smithsonian American Art Museum and the National Portrait Gallery reopened in 2006 after an extensive renovation, visitors will be able to view the Lunder Conservation Center, offering a behind-the-scenes look at how art is restored. When the museum conducted a survey and focus groups to gauge the interests of the public, a visit to a conservation laboratory was the highest-rated attraction.



**Apollo-era space suits withstood the rigors of travel in space but were disintegrating after several decades on earth.**

In 2000, the Smithsonian Institution's National Air and Space Museum embarked on a project to preserve its large collection of space suits. Smithsonian staff, museum specialists, industry experts, scientists, and volunteers worked together to learn how to stabilize, exhibit, and store the suits without causing damage. The guidelines developed by this project will be shared with museums that hold similar artifacts.

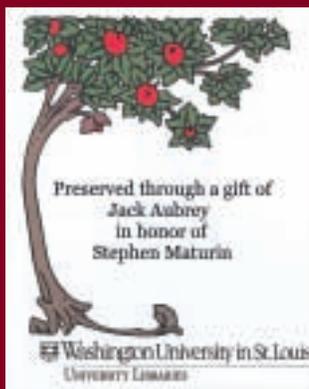


## A public trust is at risk...

Support to improve care of collections must come from individuals, foundations, and businesses, as well as public sources. The types of support can vary widely and could include a bond issue for a new storage facility, membership in a Friends of Conservation group, a major gift to endow a conservator's position, or a line item in a town budget. New funding programs that give priority to basic collections issues will provide institutions with the support they need to take action.

Federal agencies such as the Institute of Museum and Library Services, the National Endowment for the Arts, the National Endowment for the Humanities, the National Historical Publications and Records Commission, the National Science Foundation, and Save America's Treasures at the National Park Service funded many of the projects featured in this publication. These agencies have focused national attention on the need to care for collections. With their assistance, new approaches to conservation have been tested and proven effective.

Everyone who cares about the future of our heritage has a role to play in ensuring that adequate resources are available. Present and future generations depend on what we do now.



**In St. Louis, Washington University Libraries' Legacy of Books program**

encourages donations for the preservation of its collection of nearly 4 million books and other materials. For a gift of as little as \$50, the library pledges to preserve a book, and donors are thanked with a special bookplate.

## What next? *Make collections a priority*

**If you are alarmed at the condition of America's collections, there are ways you can make a difference:**

Learn what institutions important to you are doing to care for their collections.

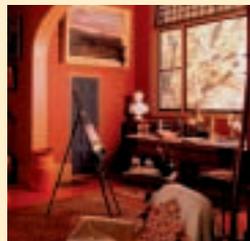
Designate your funding for collections care. Whether you are an individual donating your own funds, a foundation executive initiating new programs, or a government official developing a budget, give institutions the resources required to save collections.

Plan for emergencies. Insist that any institution you support or work for have an emergency preparedness plan that includes collections and staff trained to implement it.

Spread the word. Most people assume that collections are safe. Tell your colleagues and other decision-makers about the dangers collections face. Share this report with people whose decisions affect collections. You can request extra copies by e-mailing [survey@heritagepreservation.org](mailto:survey@heritagepreservation.org).

**Visit [www.heritagehealthindex.org](http://www.heritagehealthindex.org) where you will find:**

- The full Heritage Health Index report, with more data from the survey and a review of methodology
- More information about the projects described in this publication
- Information about resources for staff training and emergency planning
- A list of participating institutions.



# Photo Credits and Information:



**Cover** ■ Dutch Colonial manuscript. Courtesy: New York State Archives. © Conservation Center for Art and Historic Artifacts. ■ Giovanni Francesco Barbieri Guercino's *Erminia and the Shepherd* (detail). Courtesy: The Minneapolis Institute of Arts, The William Hood Dunwoody Fund. ■ Silk quilt. Courtesy: Marion County Historical Society Museum. Photo © Tom Little Photography and Imaging. ■ Volumes of *Report of the Commissioners, Washington, DC*, held by the District of Columbia Government Office of Public Records. Photo: Richard Vidutis. ■ Flag flown from Landing Craft 540 during Normandy Invasion, World War II. © Soldiers and Sailors National Military Museum. ■ Colonial-era compass used to survey Virginia. Courtesy: Marion County Historical Society Museum. Photo © Tom Little Photography and Imaging.

**Inside Front Cover** ■ Deteriorated film from Kaliska-Greenblatt Home Movie Collection, Walter J. Brown Media Archive and Peabody Awards Collection. Photo: Jeffrey J. Martin. © University of Georgia Libraries. ■ American Indian ceramic vessels. Courtesy: The Arizona State Museum, The University of Arizona. Photo: Helga Teiwes. ■ Andean tapestry (detail), 17th century, tapestry weave, cotton warp and camelid weft, 89 1/2 x 70 in. (227.3 x 177.8 cm). The Metropolitan Museum of Art, Purchase, Morris Loeb Bequest, 1956 (56.163). Photo: Textile Conservation Department. © 2004 The Metropolitan Museum of Art. ■ *Allosaurus fragilis* skull. Courtesy: National Park Service, Museum Management Program and Dinosaur National Monument. DINO 2560. [www.cr.nps.gov/museum/exhibits/dino/exb/allo\\_skull\\_rot\\_dino2560\\_exb.html](http://www.cr.nps.gov/museum/exhibits/dino/exb/allo_skull_rot_dino2560_exb.html).

**Page 1** ■ Plate from John James Audubon's *Birds of America, Volume 1*. Courtesy: Maryland State Law Library. © Conservation Center for Art and Historic Artifacts. ■ A Susanna Heebner fraktur. Courtesy: Schwenkfelder Library and Heritage Center. © Conservation Center for Art and Historic Artifacts. ■ Manner of the Antimenes Painter, Greek, Attica. Black-Figure Neck-Amphora, ca. 510-500 B.C. Terracotta. From the Permanent Collection of the Utah Museum of Fine Arts. ■ Gilbert Stuart, *Portrait of Thomas Jefferson*, 1805-1807. Oil on canvas. 48 3/8 in. x 39 3/4 in. (122.9 cm. x 101 cm.). BCMA Accession #1813.055. Bowdoin College Museum of Art, Brunswick, Maine, Bequest of the Honorable James Bowdoin III. Courtesy: Williamstown Art Conservation Center. Photo: Mike Agee. ■ Wedding dress. Courtesy: Marion County Historical Society Museum. Photo © Tom Little Photography and Imaging. ■ Decorative Japanese fans. Courtesy: National Park Service, Longfellow National Historic Site. Photo: Suzanne Martin Granly, Northeast Document Conservation Center.

**Page 2** ■ The Akeley Hall of African Mammals. Courtesy: American Museum of Natural History. Photo: Steve Reichl.

**Page 3** ■ Photograph of Gerda McClintic, Editor-in-Chief of college newspaper *The Volante*, 1934. © University of South Dakota Archives and Special Collections, I.D. Weeks Library. ■ Photograph of Chet Baker at Sioux Falls Community Playhouse, 1957. © University of South Dakota Archives and Special Collections, I.D. Weeks Library.

**Page 4** ■ James Fischer arranging bird specimens in new storage cabinets. Courtesy: Department of Ecology & Evolutionary Biology. Photo: Michael McAloon. © University of Connecticut. ■ Vertebrate storage in old facility. Courtesy: Department of Ecology & Evolutionary Biology. Photo: Randall Tracy. © University of Connecticut. ■ Vertebrate storage in new facility. Courtesy: Department of Ecology & Evolutionary Biology. Photo: Michael McAloon. © University of Connecticut. ■ Frederick Douglass' Last Will and Testament, held by the District of Columbia Government Office of Public Records. Photo: Richard Vidutis.

**Page 5** ■ Electronic and digital storage media. Courtesy: National Archives and Records Administration. ■ Basil Rathbone as Captain Esteban Pasquale and Tyrone Power as Diego Vega (*a.k.a. Zorro*) in *THE MARK OF ZORRO* (1940), directed by Rouben Mamoulian. Courtesy: University of California, Los Angeles, Film and Television Archive, Powell Library. ■ The *USS Arizona*, now resting on the harbor bottom, burns out of control, Pearl Harbor (December 7, 1941). Courtesy: Fox Movietone Collection © University of South Carolina Newsfilm Library. ■ Daisy Girl, from Lyndon B. Johnson's 1964 presidential campaign television advertisement. Courtesy: Julian P. Kanter Political Commercial Archive, University of Oklahoma. © Tony Schwartz.

**Page 6** ■ Flooded aisle at a New Mexico Museum of Indian Arts and Culture storage facility. Courtesy: Museum of Indian Arts and Culture/Laboratory of Anthropology, Department of Cultural Affairs. Photo: Anita McNeece. ■ Archaeological ceramics. © Ford Conservation Center, Nebraska State Historical Society.

**Page 7** ■ Fire-damaged negative and sleeve. Courtesy: Northwest Museum of Arts and Culture. ■ Remains of the Pleasant Reed house, Biloxi, Mississippi, destroyed by Hurricane Katrina. Courtesy: Ohr-O'Keefe Museum of Art. Photo: Betty Fiske. ■ Mold-damaged artwork by Moses Toliver. Courtesy: Ohr-O'Keefe Museum of Art. Photo: Betty Fiske.

**Page 8** ■ A page of the Dutch Colonial manuscript being conserved by Jennifer Sainato. Courtesy: New York State Archives. © Conservation Center for Art and Historic Artifacts. ■ Conservator Mary Williamson sponge cleaning stains on 1865 American flag. Courtesy: Textile Conservation Center/American Textile History Museum. © Textile Conservation Center. ■ American flag made in 1865, showing new repairs, being rolled for storage by Mary Williamson. Courtesy: Textile Conservation Center/American Textile History Museum. © Textile Conservation Center.

**Page 9** ■ *Maris Pacifici* map showing damage from flood waters. © University of Hawaii at Manoa Library. ■ *Maris Pacifici* map after receiving conservation treatment for flood damage. Photo: Jeffrey Warda. © University of Hawaii at Manoa Library.

**Page 10** ■ *Dred Scott v. Irene Emerson*, December 1849, Second Circuit Court Case, Document #49, Circuit Court Case Files, Office of the Circuit Clerk, City of St. Louis, Missouri. Courtesy: St. Louis Circuit Court. Accessed at <http://stlcourtrecords.wustl.edu> on October 17, 2005. ■ Visitors view Dred Scott's court records. Courtesy: Missouri State Archives. Photo: Michael Everman. ■ Banelier black-on-grey bowl. Courtesy: National Park Service, Museum Management Program and Banelier National Monument. BAND 1571. [www.cr.nps.gov/museum/exhibits/band/exb\\_archeology/BAND1571\\_bowl\\_exb.html](http://www.cr.nps.gov/museum/exhibits/band/exb_archeology/BAND1571_bowl_exb.html). ■ Photograph by William Henry Jackson, *Crystal Falls, Crystal Creek, 1871*. Courtesy: National Park Service, Museum Management Program and Yellowstone National Park. YELL 50364. [www.cr.nps.gov/museum/exhibits/moran/jack3.htm](http://www.cr.nps.gov/museum/exhibits/moran/jack3.htm). ■ Egyptian, Ptolemaic Period (323-30 B.C.) Sarcophagus. Wood and gilt. Gift of Natasha Rambova. From the Permanent Collection of the Utah Museum of Fine Arts. ■ Gastropod. Courtesy: National Park Service, Museum Management Program and Dinosaur National Monument. DINO 13869. [www.cr.nps.gov/museum/exhibits/dino/exb/gastropods\\_dino13869\\_exb.html](http://www.cr.nps.gov/museum/exhibits/dino/exb/gastropods_dino13869_exb.html). ■ Sino-Tibetan. Ushnisaviyaya Buddha (Multi-armed Tantric Buddha). Gilt bronze. Gift of Mrs. Richard A. Hudnot. From the Permanent Collection of the Utah Museum of Fine Arts.

**Page 11** ■ Artifacts from the Carl Sandburg manuscript collection. Courtesy: Rare Book and Special Collections Library. Photo: Thomas H. Teper. © Board of Trustees, University of Illinois at Urbana-Champaign. ■ Postcard depicting 1907 coal mining disaster in Monongah, West Virginia. Courtesy: Marion County Historical Society Museum. Photo © Tom Little Photography and Imaging. ■ Document commemorating service in the Grand Army of the Republic, a Civil War veterans group. Courtesy: Marion County Historical Society Museum. Photo © Tom Little Photography and Imaging. ■ Colonial-era compass used to survey Virginia. Courtesy: Marion County Historical Society Museum. Photo © Tom Little Photography and Imaging.

**Page 12** ■ Civil War flag from the 139th Company, Pittsburgh, Pennsylvania. © Soldiers and Sailors National Military Museum. ■ Deteriorated Civil War flag from the 139th Company, Pittsburgh, Pennsylvania. © Soldiers and Sailors National Military Museum.

**Page 13** ■ Senior paintings conservators Joan Gorman and David Marquis of the Midwest Art Conservation Center discussing their project with museum visitors. © The Minneapolis Institute of Arts. ■ City of Boston Common Council minutes with mildew-damaged bindings. Courtesy: City Clerk Archives and Records Management Division. Photo: John J. McColgan. © City of Boston. ■ Artist rendering of the Lunder Conservation Center's Paintings Conservation Studio by Richard Chenoweth, AIA. Courtesy: Smithsonian American Art Museum and National Portrait Gallery. ■ Luce Center for American Art Visible Storage/Study Center at Brooklyn Museum. © Adam Husted. ■ Visible storage facility at the Logan Museum of Anthropology. Courtesy: Beloit College. Photo © Hedrich Blessing.

**Page 14** ■ Apollo-era space suit. Courtesy: National Air and Space Museum, Smithsonian Institution (SI 2002-6975). Photo: Mark Avino. ■ "Legacy of Books" bookplate. © Washington University Libraries. ■ Newly rehoused butterflies from the Titian Peale Butterfly and Moth Collection. Photo: Catharine Hawks. © The Academy of Natural Sciences.

**Page 15** ■ 1932 painting by New Orleans artist Alexander Alaux (1851-1932), damaged by Hurricane Katrina, depicting the Mexican War Battle of Buena Vista. Courtesy: American Association for State and Local History and Old Capitol Museum of Mississippi History. ■ Civil War soldier tintype in case. Courtesy: Marion County Historical Society Museum. Photo © Tom Little Photography and Imaging. ■ Butterflies from the Titian Peale Butterfly and Moth Collection before rehousing. Photo: Catharine Hawks. © The Academy of Natural Sciences. ■ Interior of Olana, the home of Hudson River School artist Frederick Edwin Church, at Olana State Historic Site. Courtesy: New York State Office of Parks, Recreation, and Historic Preservation. ■ Wedding portrait of Julia Scott Thom, 1879, by an unknown artist. #6140-8. Courtesy: Oshkosh Public Museum. ■ Ellsworth Kelly, *Untitled (Mandora)*, 1988. Bronze. 101 x 53 1/2 x 21 inches (256.5 x 135.9 x 53.3 cm); Weight: 950 lbs. San Francisco Museum of Modern Art and anonymous private collectors (EK 782). © Ellsworth Kelly.

**Page 16** ■ Propeller from an airplane at the Paul E. Garber Preservation, Restoration, and Storage Facility, National Air and Space Museum, Smithsonian Institution. Photo: Richard Vidutis. ■ Archival documents damaged by water from Hurricane Katrina. Courtesy: American Association of State and Local History and University of Southern Mississippi Libraries, Gulf Coast Library. ■ Photo conservator Tram Vo washing negatives. Courtesy: Northwest Museum of Arts and Culture. ■ Thomas Gray's *Elegy*, after conservation. © Richard C. Baker. ■ Conservator Morgan Zinsmeister cleaning Audubon plate. Courtesy: Maryland State Law Library. © Conservation Center for Art and Historic Artifacts.

**Back Cover** ■ Dutch Colonial manuscript. Courtesy: New York State Archives. © Conservation Center for Art and Historic Artifacts.



## About Heritage Preservation

Heritage Preservation is a nonprofit organization dedicated to preserving our nation's heritage. Since its founding in 1973, its members have included libraries, museums, archives, historic preservation organizations, historical societies, conservation organizations, and other professional groups concerned with saving the past for the future. Programs include the Conservation Assessment Program, the Heritage Emergency National Task Force, and Save Outdoor Sculpture!

For information, write Heritage Preservation at 1012 14th Street, NW, Suite 1200, Washington, DC, 20005, call 202-233-0800 or visit [www.heritagepreservation.org](http://www.heritagepreservation.org)

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