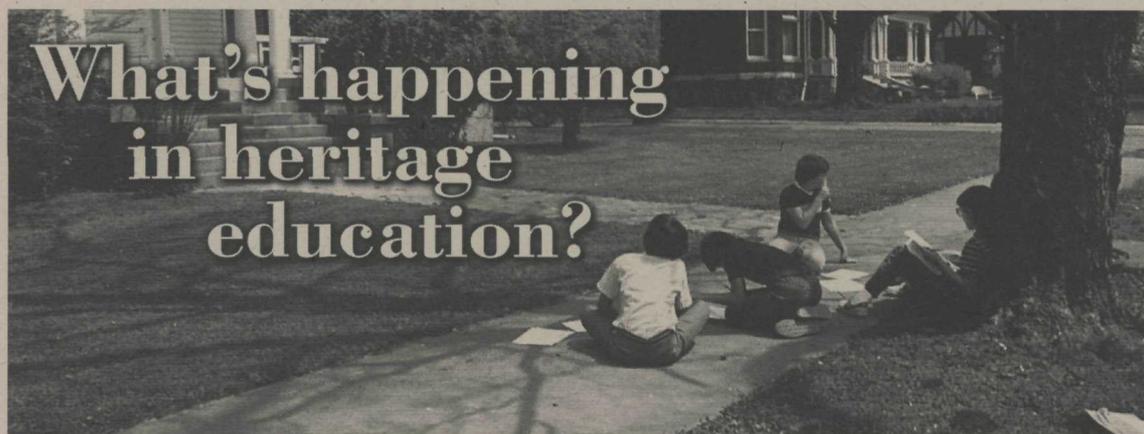


# NCPTT NOTES

National Center for Preservation Technology and Training

UNITED STATES DEPARTMENT OF THE INTERIOR • NATIONAL PARK SERVICE

FEBRUARY  
1998  
NUMBER 23



**F**ocus on 2000: A Heritage Education Perspective begins to answer this question, asked of all state historic preservation offices and other statewide heritage organizations in a recent survey sponsored by NCPTT. Released in November of 1997, *Focus on 2000* includes survey results, a history and status of heritage education, planning guidelines, and a state-by-state look at service and program providers. The Center for Historic Preservation at Middle Tennessee State University conducted the survey and produced the publication.

*The Goals 2000: Educate America Act*, signed into Federal law in March 1994, mandates an accountable and collaborative approach to education that places responsibility at the state and local levels. Towards substantial reform, the Act calls for creating broad-based and lasting partnerships among teachers, students, government agencies, heritage organizations, the work force, retirees and other citizens.

Individuals and organizations entrusted with identifying, documenting, preserving, protecting and interpreting our cultural resources should be in the vanguard of a sustained cooperative effort to build and maintain a strong conservation ethic to the "in-school generation." With the 30th anniversary of the National Historic Preservation Act of 1966 just past, heritage education should become, or continue to be, a high priority in every state.

Heritage education, as defined for the survey, is the use of local cultural resources for teaching the

required curricula of grades K-12. Activities, lesson plans, and units of study may focus on architecture, archeology, cemeteries, documents, folkways, objects and artifacts, community and family history, photographs and portraits, historic sites, museums, and urban and rural landscapes.

Based on this definition and the responses received from 40 SHPOs and 52 heritage organizations, it is clear that some heritage education services and programs are available in almost every state, although the quality, content and availability of services and programs vary considerably. To illustrate, fifteen SHPOs (38 percent) reported that their office was the leader in heritage education in their state, though only nine states have at least one full-time heritage education staff person. Seventeen offices acknowledged that they have staff who are trained or could be trained in heritage education, but other responsibilities are considered a higher priority.

In states where heritage education programs are the most successful, collaboration among SHPO, heritage organizations, the state's department of education, and individual schools and teachers is evident. In these instances, heritage education is viewed as an ongoing responsibility that is part of the overall mission. Most heritage education programs are designed for grades 4-7, the level at which most state history courses are

3

**Training**  
APWA  
resource  
guide work-  
shop.

4

**Research**  
Dating  
prehistoric  
rock art.

5

**Materials**  
**Research**  
Conserving  
historic brick  
structures.

6

**Information**  
**Management**  
Web site  
planning for  
cultural  
resource  
organiza-  
tions.

8

**NCPTT**  
**Library**

Continued on Page 2 ▶

# NCPTT NOTES

## February 1998

NCPTT Publications  
Number 1998-03

### Editor

Frances Gale

### Publications Manager

Sarah B. Luster

### Contributors

Norbert S. Baer

Dale Crandall

Mark Gilberg

Caneta S. Hankins

Bart Marable

John Robbins

### Copy Editor

Sara Burroughs

### Address

NCPTT

NSU Box 5682

Natchitoches, LA 71497

### Telephone

318/357-6464

### Facsimile

318/357-6421

### Electronic mail

ncptt@ncptt.nps.gov

### Gopher

gopher.ncptt.nps.gov

### World Wide Web

<http://www.ncptt.nps.gov/>

### Fax-on-demand

318/357-3214

### Newsletter Design

Terra Incognita

Interactive Media

[www.terraincognita.com](http://www.terraincognita.com)

NCPTT Notes is published by the National Park Service's National Center for Preservation Technology and Training. The mail list for NCPTT Notes is subject to request under the Freedom of Information Act. Persons or organizations not wanting to have mail list information disclosed should unsubscribe.

Comments and items of interest for the next newsletter should be sent to NCPTT's publications manager, Sarah B. Luster.



## What's happening in heritage education?

### Continued from page 1

taught. Secondary students and teachers are in need of additional consideration and assistance.

Survey results reinforce a concern over the lack of teacher preparation in heritage education at the college level. Only sixteen responding SHPOs have working relationships with institutions of higher education. Collaborative programs are needed to inform current and future teachers of the possibilities and methods of heritage education. SHPOs, heritage organizations and higher education institutions can work together to establish reasonable and cost-effective objectives to make heritage education a viable and vital approach to teaching many subjects. Positive results of such collaborations will move the study and sensitive use of community resources and local history into mainstream education.

Publications and workshops lead the way in teacher-training services, with historic architecture generating the most interest, materials and programs. Other topics for teaching materials include National Register properties, historic sites, community history, historic farms, historic documents and genealogy.

While an impressive array of classroom-tested materials is available, the absence of a national exchange for lesson plans, ideas and resources has been a persistent obstacle to heritage education advocates

and practitioners. *Focus on 2000* acknowledges previous and well-intentioned efforts to provide regular communication, training and dissemination on a national basis, but a project of such proportions was not possible because of the existing resources or commitment of sympathetic agencies and organizations. The expense and time of soliciting and maintaining mailing lists; producing, printing, and mailing quantities of materials; and offering workshops and courses across the country was not feasible with available resources.

Electronic communication offers innovative opportunities for heritage education. A national heritage education World Wide Web site can offer the best currently available materials to educators and students in every state and community. Links to SHPOs, heritage organizations, and other agencies, institutions, and individuals that offer heritage education materials and services will form an interactive and comprehensive network of information sources and assistance. Additionally, distance learning training classes can bring the best instruction and materials to educators in every state.

Survey results indicate that SHPOs and heritage organizations would use a national heritage education Web site in their own work and refer teachers and others to the site. Those that currently maintain their own Web sites welcome the opportunity to be a part of a national and international network. The potential benefit from the exchange of program ideas, materials and access to information from every state is an appealing and

exciting prospect. MTSU's Center for Historic Preservation — heritage education advocate and leader since 1978, when Center staff produced the NEH-funded Mid-South Humanities project — and NCPTT will consider the issues and options of a national heritage education Web site in 1998.

Admittedly, surveys have limitations. But because of the helpful responses and accompanying materials from the participating SHPOs and heritage organizations, this project has provided the best understanding to date of the current status of heritage education in the United States. *Focus on 2000* provides recommendations for SHPOs and heritage organizations for use in evaluating, developing and seeking funding for heritage education programming.

With this information, each state can assess, plan and implement measures to incorporate heritage education into 21st century classrooms. The challenges are great, but the rewards will be even greater.

— Caneta S. Hankins

*Caneta S. Hankins is projects coordinator with MTSU's Center for Historic Preservation. An advocate and practitioner of heritage education for over twenty years, Ms. Hankins has developed a variety of teaching materials and works with teachers and students at all levels to promote the use of community cultural resources. Copies of Focus on 2000 (NCPTT Publications No. 1997-08) are available from NCPTT Publications Manager Sarah Luster.*

# APWA resource guide workshop

In many communities, stewardship of public buildings and engineering works falls under the care of city and county public works departments. Public historic preservation projects may grow out initiatives from community

## APWA

APWA is an international education and professional association of individuals, public agencies and private sector companies with 67 chapters and more than 25,000 members throughout the United States and Canada. Chartered in 1938, APWA is the largest and oldest organization of its kind in the world.

## IHTIA

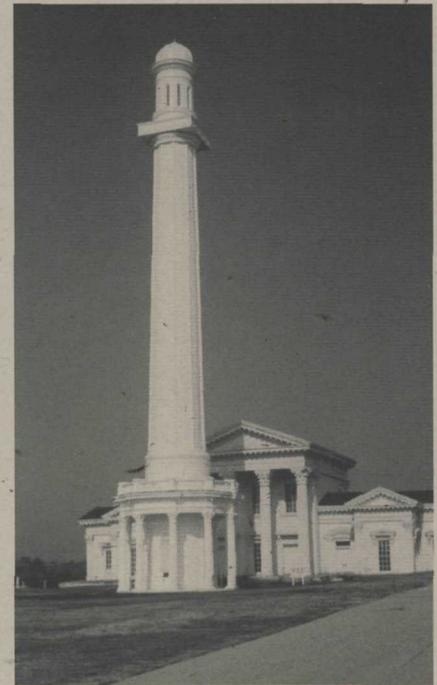
The Institute for the History of Technology and Industrial Archaeology is a research center of the Eberly College of Arts and Sciences at West Virginia University. Established in 1989, IHTIA's mission involves research, teaching and service in the history of technology, industrial archeology and the history and preservation of historic engineering works.

groups, local media, and public officials; but they are administered by the community's property managers. This presents a unique challenge for city engineers, who traditionally are educated to manage the construction and operation of roads, transportation services, utility services, trash disposal, water supply and sewage treatment — not historic preservation. Public works managers can find themselves overwhelmed by Federal and state requirements for historic preservation projects — and what they need are quick and reliable answers.

To address this need, the American Public Works Association — with support from NCPTT's Preservation Technology and Training Grants program — researched and developed a resource guide and workshop to assist public works managers with historic preservation projects.

The Institute for the History of Technology and Industrial Archaeology at West Virginia University collaborated with APWA to conduct the research and prepare the resource guide. In 1997, the Institute produced the *Preservation Resource Guide for Public Works Managers*, which contains extensive reference material and sources of information pertinent to the preservation of public works, including—

- A glossary of historic preservation terminology
  - A checklist for describing historic engineering structures
  - Abstracts of major Federal preservation laws and statutes
  - Listing of *Preservation Briefs* and *National Register Bulletins*
  - Directory of national historic preservation organizations
  - Directory of state historic preservation offices
  - Sample forms for nominating structures to the National Register of Historic Places
- The resource guide debuted during a one-day workshop, "Historic Preservation for Public Works Managers," held at the Baltimore Public Works Museum in December. The workshop attracted 22 participants from across the country, including public works managers, architects, engineers, contractors and university educators.
- Morning sessions included NCPTT Executive Director John Robbins speaking on Federal preservation laws, procedures and programs; and case study presentations by Dr. Emory Kemp, professor at West Virginia University and director of the Institute for the History of Technology and Industrial Archaeology; and Frances Gale, NCPTT Training Coordinator.



*Louisville Water Tower.*  
Photograph by Emory L. Kemp.

During the afternoon session, *Preservation Resource Guide* author Larry Sypolt reviewed the resource guide and its use in public works preservation projects. The workshop concluded with a panel discussion about the best uses of the resource guide, the need for state and local resource guides and about resolving *The Secretary of the Interior's Standards for Rehabilitation* with the requirements of Federal equal access laws.

For additional information about APWA's *Preservation Resource Guide for Public Works Managers* (NCPTT Publications No. 1998-01), contact NCPTT Publications Manager Sarah Luster.

—Dale Crandall

*Dale Crandall is APWA's facilities and fleet services manager.*

## Dating prehistoric rock art

**T**he need for accurate dating methods for rock paintings has long been recognized as critical to studying and interpreting prehistoric rock art. Without an absolute date it is impossible to relate a rock painting to its archeological context. Direct dating of rock paintings using radiocarbon dating methods, though attempted for at least a decade, has yielded mixed results and must still be considered experimental.

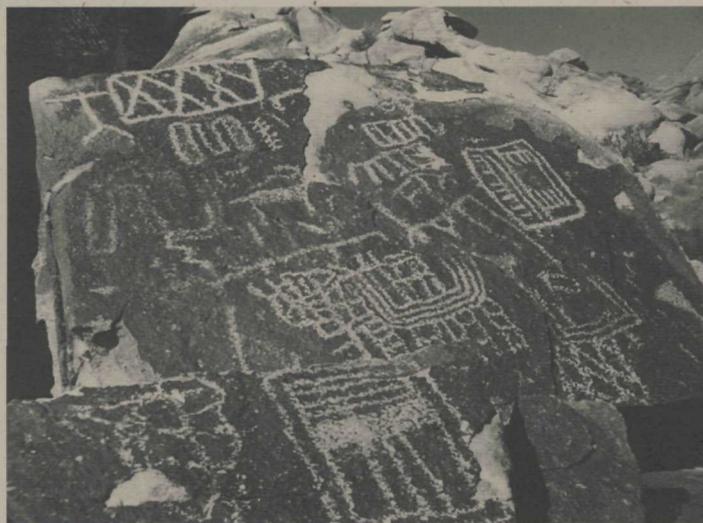
The age of rock paintings can be determined using accelerator mass spectrometry (AMS) radiocarbon dating methods, provided the following conditions apply — 1) organic matter is contained in the paint; 2) sufficient organic matter is present to yield adequate amounts of carbon to date; 3) organic carbon can be extracted without also removing carbon from stone or mineral accretions found both above and below the paint layers, or from the atmosphere; 4) the extraction does not introduce significant mass fractionation; 5) the carbon present in the organic matter originally in the paint has not exchanged with other sources of carbon after paint application; and 6) the basal rock and mineral accretions associated with the rock painting can be separated from the pigment layer and do not contain sufficient organic contamination to invalidate a date.

Drs. Marvin Rowe and Marion Hyman and their students, Jon Russ, Scott Chaffee,

Wayne Ilger, Ruth Ann Armitage and Mary Nichols in the Department of Chemistry at Texas A&M University, have developed a method to selectively oxidize the organic components of paint samples using oxygen plasma, which effectively overcomes many of the difficulties associated with organic contamination of the sample. Plasma yields organic

dizing plasma reacts only with organic carbon in the sample.

The main disadvantage of the oxygen plasma pretreatment is that any organic carbon other than that added to the original paint will also be oxidized (see condition 5 above). With support from NCPTT's 1996 PTT Grants program, Rowe and Hyman developed a method to eliminate or reduce this organic contamination. A series of experimental trials was conducted in which a sample from a single painting from a rock art site in the Lower Pecos River region



Without an absolute date it is impossible to relate a rock painting to its archeological context.

carbon as carbon dioxide, which then is analyzed for carbon 14 with accelerator mass spectrometry. Decomposition of any inorganic carbon present as basal rock or basal accretions is prevented by running the plasma at low temperature. In this way the oxi-

logical charcoal samples to remove humic and fulvic acid contamination and to decompose limestone included with the pigment layer before C14 analysis.) The samples then were radiocarbon-dated with the oxygen plasma pretreatment. Digestion in dilute solutions of hydrogen chloride seemed to exert a deleterious effect on the plasma chemical dating technique, which yielded spurious or inconsistent dates. It was suspected, though not confirmed, that calcium oxalate accretions that form over most rock paintings are altered by the application of acid due to release of organic contaminants or decomposition of the calcium oxalate into species that may undergo oxidation in the oxygen plasma. The most reliable dates were obtained when samples were treated only with sodium hydroxide. Ages determined for these samples were consistent with ages expected on the basis of archeological inference.

To date, this technique has been used to estimate the age of a range of rock art paintings from various sites with good results. Though the dates obtained using this methodology generally agree with current archeological inference, verification awaits confirmation by an independent technique.

For reprints of various articles published by Rowe and others describing plasma extraction and AMS C14 dating of rock paintings, contact NCPTT Research Coordinator Mark Gilbert.



Fort Jefferson, Dry Tortugas National Park.  
Photograph by Christopher Doncecz.

## Conserving historic brick structures

The NCPTT Publications Support Grants program is contributing to the publication, expected in Fall 1998, of approximately 40 research papers in *The Conservation of Historic Brick Structures: Case Studies and Reports of Research*. The book's editors are N.S. Baer, S. Fitz and R.A. Livingston.

The papers are the results of eight international experts meetings held since 1987, sponsored by the North Atlantic Treaty Organization's Committee on the Challenges of Modern Society pilot study. One meeting was held at Colonial Williamsburg, where a tradition of hand-made brick production continues.

Included among the research reports are studies of the firing temperatures of historic bricks, analyses of deteriorated bricks and studies of

deterioration mechanisms, including biodeterioration, salt damage and the effects of air pollutants and moisture on masonry. Non-destructive evaluation methods such as acoustic tomography, neutron scattering and flat jack methodologies are considered for laboratory test walls, monuments and full-scale model structures. Considerable attention is devoted to historic mortars, their analysis and behavior under the stress of air pollution and to the development of compatible modern formulations. Conservation methods for brick masonry, including desalination, protective coatings and injection grouting, were studied. The publication will include many case studies, such as Octagon House, Washington; Basilica San Marco, Venice; Scrovegni Chapel, Padua; Hagia Sophia,

Istanbul; and St. Pancras Chambers — designed as the Midland Grand Hotel — London.

### Background

Archeological evidence demonstrates the structural use of clay-based brick for at least 10,000 years. Initially, alluvial clay mixed with straw was hand-molded in the form of bricks and then sun-dried before incorporation in structures. As early as the third millennium BC, fired brick were in use. Economic considerations, in particular the limited availability of fuel in the Middle East, restricted the use of fired brick to exterior surfaces in ancient structures, and sun-dried or poorly fired brick was used internally.

The most important examples of brick construction in the ancient world were those of the Romans, and the text of Vitruvius (*circa* 25 BC) provides details of their techniques. It was the Romans who introduced brick manufacture to Britain. Their mortars included a simple lime mortar as well as one including volcanic ash, forming a pozzolanic cement. On formation of the Hanseatic League in the 13th century, records demonstrate an international trade in brick, such as the importation of 202,500 bricks from Ypres for the construction of the Tower of London.

With only minor improvements in the methods of manufacture, hand-made brick remained in production until the mid-19th century, when such developments as the Hoffmann Circular Kiln in 1858, extrusion methods of brick formation with wire-cut-

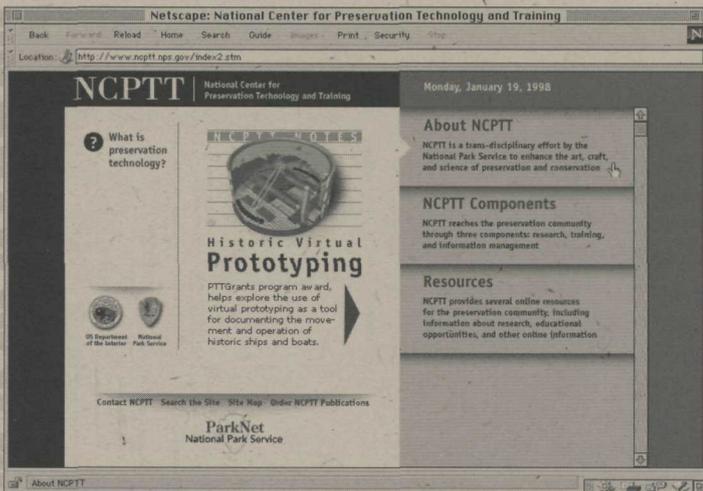
ting, and, eventually, continuous production with firing in tunnel kilns rendered hand-made brick obsolete. In modern manufacture, extruded, wire-cut brick pass through a gas-fired tunnel kiln in continuous sequence of pre-heating, firing and cooling on a three-day cycle. Despite the introduction of concrete-based construction in the 19th century, vast quantities of brick are still produced. In the 1990s, for example, annual production in Britain stood at 3.5 billion bricks.

Though fired brick is among the most durable of building materials, a variety of deterioration mechanisms can lead to severe damage to individual bricks and even complete failure of brick structures. Of primary concern is the durability of the brick itself. In the United States, brick is classified based on freeze-thaw criteria as "severe weathering," "moderate weathering" and "negligible weathering" for both common and face brick. In Britain, brick is classified as "internal," "ordinary" and "special engineering" quality. Often a stucco facing is introduced where lower-quality brick is used on exterior surfaces.

### Deterioration mechanisms

It is important to recognize that brick usually is part of a complex masonry structure that includes mortar, flashing elements and often stone. Geotechnical hazards such as subsidence and earthquakes can have devastating consequences for brick structures, a circumstance reflected in the building codes of areas of high

*Continued on Page 11* ▶



## Web site planning for cultural resource organizations: NCPTT's Web site redesign as a case study

*Editor's note: On February 2, 1998, NCPTT completed the first stage of a major Web site redesign. NCPTT is transforming its site into a better, more powerful on-line resource for the national preservation and conservation community. Along with the new Web site comes a new URL: <<http://www.ncptt.nps.gov>>.*

*The following article outlines the first phases — the planning phases — of NCPTT's Web site redesign, so that other organizations may benefit from NCPTT's experience.*

Well-designed Web sites are not publications — they are organized spaces that connect people with information and with each other. In fact, good Web site design has more in common with good exhibit design than with preparing a publication. Both Web sites and exhibits must entice their visitors, provide clear paths of exploration, keep visitors' attention and connect visitors with what they are looking for — from interactive experiences to in-depth informational resources. While exhibits and

Web sites both come in a wide array of styles and content, the success of both depends on careful planning, design and execution.

Developing a well-designed site can be divided into five phases. The first two phases — definition and architecture — comprise the project planning phases, during which the site's objectives and information design are established. The latter three phases — design, implementation and integration — comprise the project development phases during which the site is

designed and constructed. While jumping directly to the development phases may be tempting, the ultimate success of a Web site depends on the careful planning that precedes creating the first HTML document or graphic file.

### Definition

Because the purpose of developing a Web site varies from organization to organization, the first step in a Web project is clear definition of primary objectives, target audiences and project scope. Although organizations may develop sites because other groups have Web sites, this reason alone is not sufficient basis for an effective site. Effective Web sites work because they achieve substantial and well-defined objectives. Taking time to clarify a site's objectives, to analyze its audiences and to develop strategies for appealing to each portion of the audience is necessary for the success of the whole project.

To begin, organizations should develop a one- or two-sentence Web site mission statement that summarizes the goals of the site and its desired effect on your organization and the audiences served. With a general mission defined, the next step is to spell out specific strategies for achieving the goals. This may be as simple as a list of the three things that the site should accomplish, or it may involve more detail that outlines numerous objectives. Either way, it is important to keep the objectives specific and realistic. Determining the measurement by which achieving objectives will be assessed also is crucial. Will it be determined by the number of visitors? By increased publicity? By critical acclaim? The answer is best decided by each organization.

In the definition phase of NCPTT's Web site redesign, six objectives were formulated. The NCPTT Web site is intended to — 1) fulfill goals and objectives outlined in

### Defining Web Site Audiences

#### Administrative Users (Private)

Internal users responsible for the site's upkeep and content management

#### Internal Users (Private)

Users within the organization, such as on an intranet

#### Privileged Users (Semi-Private)

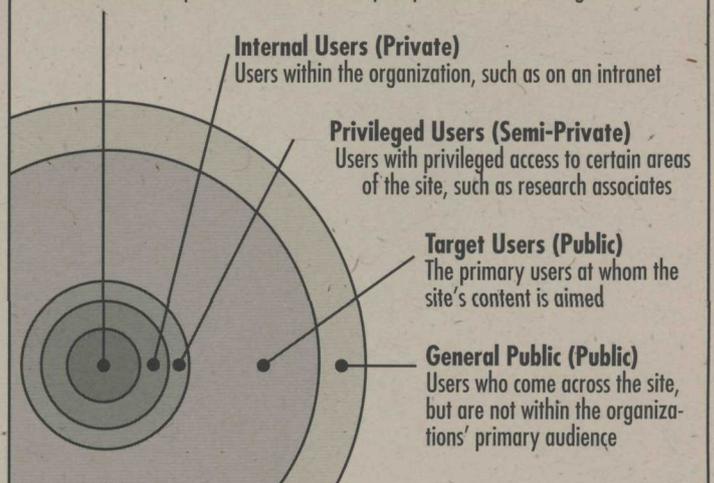
Users with privileged access to certain areas of the site, such as research associates

#### Target Users (Public)

The primary users at whom the site's content is aimed

#### General Public (Public)

Users who come across the site, but are not within the organization's primary audience



NCPTT's mission and long-range strategic plan; 2) serve as clearinghouse and delivery mechanism for information sponsored, collected and developed by NCPTT; 3) clarify NCPTT's role in the conservation and preservation community; 4) promote an increased awareness of NCPTT's distinctive presence in the conservation and preservation community; 5) promote on-line communication for individuals and organizations involved in preservation and conservation; and 6) provide a means to measure the impact and reach of NCPTT's programs.

Another vital issue to be addressed is a Web site's audiences. Web sites typically address five potential audiences — two of which are public, two of which are private, and one of which is semi-private. A site's public audiences include a target audience and the general browsing public. A site's private audiences include internal users of the site who may have access to a proprietary section of the site — such as an organization's staff — and administrative users who are responsible for maintaining the site and its content. Finally, a site may also have a semi-private section for special users, such as a portion available only to registered users.

The distribution of audience sizes will depend on the individual organization. Some sites may have a very wide target audience and a fully developed internal Web site for the organization's staff; other sites may have a very narrow target public and an administrative section used by only a few people, or even just one person.

It is important to determine as much as possible about each of a site's audiences, such as reasons for visiting the site, anticipated frequency and length of visits, the educational and professional background of the audience, and whether the user will be accessing the site from home or office. Other demographics are related more to the audience's hardware and software configurations, such as computer platforms, browser software and speed of Internet connection. Organi-

---

Effective Web sites work because they achieve substantial and well-defined objectives. Taking time to clarify a site's objectives, to analyze its audiences and to develop strategies for appealing to each portion of the audience is necessary for the success of the whole project.

---

zations with existing Web sites may be able to assess some of these statistics from server logs that record information about Web site visitors.

For NCPTT's Web site, the target public is preservation and conservation professionals who need a site for researching preservation- and conservation-related Internet resources, training opportunities and the results of NCPTT's research and training activities.

### Architecture

The second phase of site design pairs the objectives and audience defined in the definition phase with the organization's "content." Methods involved in choosing appropriate content, organizing and prioritizing content, and creating a

clear navigation system through the content are drawn from the growing field of information architecture.

When designing the information architecture of a site, use the objectives and audiences determined in the definition phase to decide the nature of the site's content. Actual content might come from sources such as a digital version of a museum's collection or a printed history of a preservation organization. Other content may be developed spe-

cially for the site, such as a database of an organization's members or an on-line discussion forum.

ervation-related information on its existing gopher and Web site, such as research findings, conferences, job postings, funding opportunities and other on-line resources. This information continues to be relevant and will be reformatted for enhanced access via NCPTT's new site.

Content organization is the important next step. While there are few universal rules for information design, taking the time to examine three principal factors leads to better results. First, determine natural organizational systems within the content which would help to make the information more accessible. Second, determine particular objectives that would require giving certain information priority. Third, determine what the site's audience will be looking for when contacting the site.

Working from the three categories of audience needs, NCPTT's Web site is configured in three "meta" components — "About NCPTT," with generally static organizational and background information; "NCPTT Components," a more active section for NCPTT's three components — research, training and information management — ; and "Resources," a searchable database of preservation- and conservation-related information. The first stage of the redesign implements "About NCPTT" and "NCPTT Components;" connections to existing gopher and Web resources will be maintained until "Resources" is implemented in Spring 1998.

Visualizing the information architecture of the site is

Continued on Page 9 ►

## New to NCPTT's library

This occasional series reviews recent additions to NCPTT's library. These particular reviews are by John Robbins.

### Lighting Historic Buildings

By Derek Phillips  
Illustrated, 206 pp. New York: McGraw-Hill (1997)

This book's bibliography demonstrates that the topic of historic buildings and lighting is by no means fully addressed. Although Mr. Phillips' new book does not completely fill the gaps, the volume is a good new complement to standards such as Roger Moss' *Lighting for Historic Buildings* and Stanley Wells' *Period Lighting* and a good addition to a comprehensive preservation library.

*Lighting Historic Buildings* treats the subject under three broad headings: daylight, artificial light and case studies of lighting projects. Under each heading, the author discusses principles and applications of historic and modern lighting, and provides ample illustrations. The case studies are chiefly from Britain — where Mr. Phillips has practiced as an architect and lighting designer since the late 1950s — but projects from around the world are included. To this reader the case studies are uneven in significance and

execution (and in the quality of the book's images), but the sum of the evidence supports Mr. Phillips' principal thesis: Appropriate interior and exterior lighting for historic buildings cannot be formulaic — rather, lighting is an immaterial but real aspect of the historic fabric, and designing appropriate lighting for historic buildings begins with the sort of close study that good preservationists now afford to such building fabric as masonry or wallpaper.

A shortfall of the case studies is that the author does not disclose enough of the technology behind the successes. Among prominent examples — from this reader's experience — that deserve elaboration are the computer modeling of 1990s exterior lighting design schemes for the Louvre that led to the in-place lighting technology, and the principles and equipment behind the 1980s lighting of the Statue of Liberty. More detailed discussion of good practice certainly would help to advance the field of preservation-lighting.

On the topic of museum lighting and conservation, professional readers will recognize that the two pages that Mr. Phillips affords the topic are inadequate — and that no lighting that might affect a museum collection should be attempted

without a competent conservator as part of the exhibit design team.

Mr. Phillips deserves thanks for sharing a long career in lighting design, and McGraw-Hill deserves thanks for its dedication to publishing on preservation topics.

### American Canvas

By Gary O. Larson  
Illustrated, 194 pp. Washington: National Endowment for the Arts (1997)

### Creative America

Illustrated, 34 pp. Washington: President's Committee on the Arts and the Humanities (1997)

Motivational speakers talk the sequence of values, vision, passion, plan and commitment as a path to a successful undertaking. These two studies address, in a closely parallel manner, all five steps with particular emphasis on values and vision. To those whose work includes contemplating, explaining or advocating the value of preservation and conservation, I recommend these studies for their vision of American cultural life.

One must read preservation and conservation into *American Canvas*, but it isn't much of a stretch. Chapters on "Culture and Community," "Arts and Education" and "The Arts and Telecommunications" amply demonstrate the common ground shared by many cultural endeavors. Preservationists share the vision of culture as sustaining

and developing American communities, the vision of culture as a strong component of American education, and the vision of a telecommunications network that distributes information efficiently and widely. Preservationists will recognize their own work within this articulate discussion of the arts. And they will recognize a vision in common with the arts communities in the study's recommendations for supporting the nonprofit arts, working together, meeting community needs, educating the young and entering the information age.

*Creative America* strikes many of *American Canvas*'s chords — and, because preservation is a more prominent theme, preservationists will immediately recognize their place in this study's broad vision for American cultural life. The section called "Investing in Cultural Capital" recommends supporting a national assessment of the nation's preservation needs and long-term plans to protect America's cultural legacy. Another section, "Affirming the Public Role," says that "Because all Americans have a stake in preserving our cultural heritage, there is a national and therefore a federal responsibility for this legacy." The section "Technology and Preservation" recommends "that businesses and corporations ... preserve books, recordings, videotapes, films, historic properties and other cultural materials they own ... (and) assist cultural organizations, either through grants or in-kind donations, to strengthen their capacities to use technology to reach new audiences, and to digitize cultural material."

Both studies are essential reading for those interested in trends that will motivate American cultural life in the near future. And long-range plans should consider and incorporate these studies' values and visions. As the President's Committee states in *Creative America*, "a great nation must invest in its cultural development and preservation, just as it supports scientific discovery and protects natural resources."

Copies of *American Canvases* may be available from the Office of Public Information, National Endowment for the Arts; telephone 202/682-5400. Copies of *Creative America* may be available from the President's Committee on the Arts and the Humanities; telephone 202/682-5409. The mailing address for both organizations is 1100 Pennsylvania Avenue NW, Washington, DC 20506.

## Parks and Gardens of the Greater Los Angeles Region

Achva Benzinberg Stein, ASLA, editor  
Illustrated, 58 pp. *Los Angeles: School of Architecture, University of Southern California* (1996)

## The Gardens of Louisiana

Photographs by A.J. Meek, text by Suzanne Turner  
Illustrated, 237 pp. *Baton Rouge: Louisiana State University Press* (1997)

These volumes offer two excellent approaches to documenting the land-

scapes of a region — and each approach is an excellent strategy for raising a region's awareness of the deep significance of its landscapes and their preservation.

*Parks and Gardens of the Greater Los Angeles Region* covers broad spectra of scale and time — from a single 1000-year-old oak in Encino to the 4000-plus acres of Griffith Park, from 18th century land-grant ranches to the not-quite-finished gardens of the new Getty Center — in over 270 brief entries. The cumulative effect of the short descriptions and small illustrations is the revelation of a Los Angeles not previously known. Entry by entry, the reader learns what a truly important set of sites comprises the landscape heritage of the Los Angeles region — and, for those dedicated to that heritage, this slim volume economically demonstrates that the whole would be diminished by any loss of the parts. In *Parks and Gardens*, Achva Benzinberg Stein, who directs the landscape architecture program at University of Southern California, presents a model and accessible regional landscape catalog.

In *The Gardens of Louisiana*, Suzanne Turner and A.J. Meek take a different approach to revealing a regional landscape. *Gardens* is a deeply thought "journey through time" with 21 stops on a state-wide itinerary led by Turner, who directs the landscape architecture program at Louisiana State University, and Meek, who teaches photography there.

Turner's opening essay places her itinerary in the 250-year-plus context of Louisiana gardening. Along the site-by-

site journey throughout Louisiana, Turner provides commentary that focuses on the people who made the places, while Meek provides vignettes — "details that give a feel for the whole" — in the tradition of landscape photographs by the 19th century French photographer Eugène Atget. Their volume is quite the opposite of a comprehensive catalog; it is rather a selection of superb examples through which the reader recreates the whole from the details of history and

narrow-angle views of today.

The preservation community is beginning to embrace landscapes as integral — and individually significant — components of the cultural resources realm. Each of these volumes is an exemplar of the types of publications that can spark interest in landscape preservation. Those who are working to foster interest in historic landscapes should consult these books — as stimulants for their own regional preservation efforts.

## Web site planning Continued from page 7

best done with a site schematic — a graphic representation of the site's structure that shows how the information in the site is organized and connected. The site schematic also is a good tool for planning future areas of the site, since these can be placed into the master scheme even if they are not developed initially.

## Before you start

Books and periodicals on Web site development often emphasize technical or graphical components of the project, but the planning phases are the real foundation upon which a successful Web site is built. Once a site's objectives and audience are determined and its information architecture is fully developed, an organization is better able to begin implementing its on-line presence.

—Bart Marable

*Bart Marable is creative director and principal of Terra Incognita, an information architecture and new media design firm.*



## The Information Ecosystem: Managing the Life Cycle of Information for Preservation and Access

March 10-13  
College Park, Maryland

In a training course that teaches managers how to create, manage, adapt and reuse information — particularly electronic information — participants will learn —

- What is meant by ecology of information
- How to create and manage long-lived information effectively, and what the payoffs are
- How to plan effective information management in the 21st century
- How to integrate legacy data
- What the legal constraints on information use are.

This training is appropriate for cultural and natural resource managers responsible for supervising the creation, management, and use or reuse of information. Park superintendents, information officers, records managers, librarians, archivists, SHPO officers, and others from Federal and state government, nonprofit organizations and corporations will be interested in attending.

For more information, contact Gay Tracy, Northeast Document Conservation Center; telephone 978/470-1010, facsimile 978/475-6021, e-mail <tracy@nedcc.org>.

## Questions of Interpretation: Historic Urban Settlements and Cultural Tourism

March 28-29  
Washington, DC

This two-day conference will explore the interplay of interpreting and conserving urban places, with panels of international preservationists, historians and planners addressing how interpretive techniques can animate historic places and develop new constituencies.

The conference is sponsored by the United States Committee of the International Council on Monuments and Sites, with the Townscape Institute and the National Park Service as partners.

For more information, contact US/ICOMOS, 401 F Street NW, Room 331, Washington, DC 20001; telephone 202/842-1866, facsimile 202/842-1861, Web <<http://www.icomos.org/usicomos>>

## ASTM International Symposium: The Use of and Need for Preservation Standards in Architectural Conservation

April 18-19  
Atlanta, Georgia

Because existing standards for testing and materials are geared toward modern materials and systems, preservation professionals often have difficulty using these standards to evaluate historic materials and

buildings. This symposium will focus on the need for preservation standards. Sessions on theory and practice, building assemblies and systems, materials, and structural repairs will consider new techniques and test methods as well as the many variables dictated by preservation projects. The work of international organizations in developing preservation standards will be the subject of a round table discussion.

The symposium is sponsored by ASTM Committee E-6 on Performance of Buildings and ASTM Subcommittee E06.24 on Building Preservation and Rehabilitation Technology, in cooperation with US/ICOMOS and the Association for Preservation Technology International.

For more information, contact Lauren B. Sickelstaves; telephone 248/545-4643, e-mail <[lstaves@ibm.net](mailto:lstaves@ibm.net)>.

## Aerial Photo Applications to Cultural Resource Management

May 11-15  
Fort Laramie, Wyoming

The National Park Service, in association with the US Forest Service, offers this workshop in basic photo applications for aerial and terrestrial photographs.

Aerial photos constitute a vast historic resource that has been sadly under-utilized. Basic skills in photogrammetry, photo-interpretation, orienteering, map update and

GIS are essential tools for professionals who wish to utilize existing data effectively and efficiently.

Additional information on the workshop is available from Steven De Vore at the National Park Service's Intermountain Support Office in Denver, Colorado; telephone 303/969-2882, e-mail <[steve\\_de\\_vore@nps.gov](mailto:steve_de_vore@nps.gov)>.

## Non-Destructive Investigative Techniques for Cultural Resource Management

May 18-22  
Pecos, New Mexico

The practical application of non-destructive geophysical techniques for archeological investigations — including electromagnetics, ground penetrating radar, metal detectors, electrical resistivity, seismic techniques, magnetics, gravity and self potential — will be included in this workshop offered by the National Park Service. The workshop's major emphasis will be field use of equipment. Instruction also will be offered in the use and interpretation of aerial photographic techniques, and in the use of low altitude large scale aerial reconnaissance.

Additional information on the workshop is available from Steven De Vore at the National Park Service's Intermountain Support Office in Denver, Colorado; telephone 303/969-2882, e-mail <[steve\\_de\\_vore@nps.gov](mailto:steve_de_vore@nps.gov)>.

## AIC Annual Meeting

June 1-7  
Arlington, Virginia

The 26th annual meeting of the American Institute for the Conservation of Historic and Artistic Works will focus on "Disaster Preparedness, Response and Recovery."

The meeting will offer a wide range of current information crucial to preservation and conservation specialists responsible for historic prop-

erties and collections. The agenda includes substantial day-long sessions on preparedness and response, specialty group sessions on recovery, and workshops on fire detection, suppression, and salvage and disaster triage.

For more information, contact AIC, 1717 K Street NW, Ste 301, Washington DC 20006; telephone 202/452-9545, facsimile 202/452-9328, e-mail <infoAIC@aol.com>, Web <<http://palimpsest.stanford.edu/aic/>>.

## Beehive-Mills Lane Architecture Fellowships

A new (since 1996) fellowship program is available to qualified graduate students, scholars and practitioners in architecture and historic preservation. The Beehive-Mills Lane Architecture Fellowships focus on advanced studies in the architecture of the American South before 1860 and historic preservation. Maryland, Virginia, the Carolinas, Georgia, Alabama, Florida, Mississippi, Louisiana, Tennessee and Kentucky comprise the region of study. Fellowship stipends are \$1,500 maximum for up to three months. Applications are accepted throughout the year.

For more information, contact Bradford Rauschenberg, Director of Research, Museum of Early Southern Decorative Arts, POB 10310, Winston-Salem, SC 27108; telephone 336/721-7366, facsimile 336/721-7367.

## HABS/HAER 1998 Summer Internships

The National Park Service's Historic American Buildings Survey/Historic American Engineering Record creates a lasting archive of America's historic architecture and America's industrial, maritime and engineering heritage. Field work throughout the US — including measured drawings, photography and written history — by Summer teams is an important means for developing the HABS/HAER's archive. HABS/HAER Summer teams also are excellent training environments, and many prominent preservation practitioners are HABS/HAER alumni.

Applications for positions on HABS/HAER 1998 Summer teams are due March 7. For information and application forms, contact HABS/HAER; telephone 202/343-9626, e-mail <robyn\_brooks@nps.gov>, Web <[www.cr.nps.gov/habshaer/jobscomp.htm](http://www.cr.nps.gov/habshaer/jobscomp.htm)>.

## Conserving historic brick structures Continued from page 5

seismic risk. In veneer construction, improper or degraded metal wall ties can lead to cracking or catastrophic failure.

As with stone masonry, the role of water in brick deterioration is critical. Water penetration, due either to inadequate flashing or to poor bonding between the mortar and brick, can lead to freeze-thaw failure. Salts from external sources — such as de-icing compounds or from the mortar or its decomposition products — can cause brick disintegration. Though a properly fired brick will be highly resistant to chemical attack, improper cleaning methods, especially with formulations incorporating hydrofluoric acid, cause color change and deterioration. Sand blasting as a cleaning method is proscribed for historic brick structures.

Biodeterioration has been demonstrated as a serious threat to brick structures through a range of mechanisms, including water retention, mechanical action and chemical alteration.

The pilot study and recent work funded by the European Union and the National Science Foundation signal a welcome broadening of research on historic masonry structures to include brick and mortar.

—Norbert S. Baer

*Norbert Baer is Hagop Kevorkian Professor of Conservation at New York University, where he has been on the faculty since 1969. His research interests include the application of physico-chemical methods to the examination and preservation of artistic and historic works.*

### Correction from NCPPT Notes 22

Page 8: Distance learning programs and courses. University of Victoria (not University of Vancouver), Division of Continuing Studies, 250/721-8462, <<http://www.uves.uvic.ca/crmp/demat.htm>>

# Our Mission

## United States Department of the Interior

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally-owned public lands and natural and cultural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife and biological diversity; preserving the environment and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation.

The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen responsibility in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under US Administration.

## National Park Service

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education and inspiration of this and future generations. The Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

## National Center for Preservation Technology and Training

The National Center for Preservation Technology and Training promotes and enhances the preservation of prehistoric and historic resources in the United States for present and future generations through the advancement and dissemination of preservation technology and training.

NCPTT, created by Congress, is an interdisciplinary effort by the National Park Service to advance the art, craft and science of historic preservation in the fields of archeology, historic architecture, historic landscapes, objects and materials conservation, and interpretation. NCPTT serves public and private practitioners through research, education and information management.

## NATIONAL PARK SERVICE

### Director

Robert G. Stanton

### Associate Director, Cultural Resource Stewardship and Partnerships

Katherine H. Stevenson

## NCPTT

### Executive Director

John Robbins

john\_robbins@ncptt.nps.gov

### Information Management Coordinator

Mary S. Carroll

mary\_carroll@ncptt.nps.gov

### Information Management Associate

Lance Ellis

### Information Management Assistant

Jeff Fabian

### Research Coordinator

Dr. Mark Gilberg

mark\_gilberg@ncptt.nps.gov

### Materials Research Program Manager

Dr. Mary F. Striegel

mary\_striegel@ncptt.nps.gov

### MRP Associates

Dr. Rakesh Kumar

Kevin Ammons

### Training Coordinator

Frances Gale

frances\_gale@ncptt.nps.gov

### Training Associate

Paula Cook

### Training Assistant

Sheila Richmond

### Publications Manager

Sarah Luster

## PRESERVATION TECHNOLOGY AND TRAINING BOARD

### Chair

Dr. Elizabeth A. Lyon

### Vice Chair

Robert Z. Melnick, FASLA

School of Architecture and Allied Arts  
University of Oregon

### Secretary of the Interior's representative

E. Blaine Cliver

Historic American Building Survey/  
Historic American Engineering Record  
National Park Service

Dr. Neville Agnew

Getty Conservation Institute

Patricia H. Gay

Preservation Resource Center of New Orleans

Nicholas Gianopoulos

Keast and Hood Company

Dr. Alferdteen B. Harrison

Margaret Walker Alexander National Research  
Center, Jackson State University

Dr. James K. Huhta

The Center for Historic Preservation  
Middle Tennessee State University

Dr. W. James Judge

Department of Anthropology  
Fort Lewis College

Christy McAvooy

Historic Resources Group

F. Blair Reeves, FAIA

School of Architecture  
University of Florida

Carolyn L. Rose

Department of Anthropology  
National Museum of Natural History  
Smithsonian Institution

Frank Emile Sanchis, III

National Trust for Historic Preservation

Dr. Randall J. Webb

representing Northwestern State  
University of Louisiana

First Class Mail  
Postage & Fees Paid  
National Park Service  
Permit No. G-83

NATIONAL CENTER FOR  
PRESERVATION TECHNOLOGY AND TRAINING  
NSU Box 5682  
NATCHITOCHEES, LA 71497  
OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300