CRM

CULTURAL RESOURCE MANAGEMENT
Information for Parks, Federal Agencies, Indian Tribes, States, Local Governments, and the Private Sector

VOLUME 19 NO. 5 1996

CRM in the National Parks
The Harpers Ferry Example

U.S. DEPARTMENT OF THE INTERIOR
National Park Service
Cultural Resources

PUBLISHED BY THE NATIONAL PARK SERVICE

To promote and maintain high standards for preserving and managing cultural resources

DIRECTOR
Roger G. Kennedy

ASSOCIATE DIRECTOR
Katherine H. Stevenson

EDITOR
Ronald M. Greenberg

PRODUCTION MANAGER
Karlota M. Koester

GUEST EDITOR
Bruce J. Noble, Jr.

ADVISORS
David Andrews
Editor, NPS
Joan Bacharach
Museum Registrar, NPS
Randall J. Biallas
Historical Architect, NPS
Susan Buggey
Director, Historical Services Branch
Parks Canada
John A. Burns
Architect, NPS
Harry A. Butowsky
Historian, NPS
Pratt Cassity
Executive Director,
National Alliance of Preservation Commissions
Muriel Crespi
Cultural Anthropologist, NPS
Craig W. Davis
Archeologist, NPS
Mark R. Edwards
Director, Historic Preservation Division,
State Historic Preservation Officer, Georgia
John Hnedak
Architectural Historian, NPS
Roger E. Kelly
Archeologist, NPS
Antoinette J. Lee
Historian, NPS
John Poppeliers
International Liaison Officer
for Cultural Resources, NPS
Brit Allan Storey
Historian, Bureau of Reclamation
Federal Preservation Forum

CONTRIBUTING EDITORS
Stephen A. Morris
Certified Local Governments (CLG) Coordinator, NPS
Kay D. Weeks
Technical Writer-Editor, NPS

CONSULTANTS
Wm. H. Freeman
Design, Imaging, Production–Freeman Publishing Services

Contents

VOLUME 19 NO. 5 1996
ISSN 1068-4999

CRM in the National Parks

CRM in Harpers Ferry National Historical Park 3
An Overview
Bruce J. Noble, Jr.

A Place in Time 5
Thoughts on Harpers Ferry
Donald W. Campbell

The Architectural Program of Harpers Ferry NHP 7
Evolution, Accomplishments, Expectations
Peter F. Dessauer

Using Cultural Landscape Reports 11
Steven M. Lowe

The Flood of 1996 14
Opportunities for Interpretation and Training
Bruce J. Noble, Jr.

A Confluence of Goals, Employee Development, and Resource Preservation 17
Thomas A. Vitanza

Preserving Artifacts 20
Displaying John Brown's Bible
Frank Schultz-DePalo

The Virtual Visitor Center 23
Breaking New Ground on the World Wide Web
David T. Gilbert

Harpers Ferry's History Database 25
Patricia Chickering

Transforming Craft to Wage Labor 27
Archeology of a Worker's Houselot
Paul A. Shackel

SHPO Partnership with Harpers Ferry 31
Susan M. Pierce

CRM at Harpers Ferry NHP 33
A Concluding Perspective
Barbara J. Howe

Cover: John Brown's Fort, 1886–1889. From Library of Congress collection.

Statements of fact and views are the responsibility of the authors and do not necessarily reflect an opinion or endorsement on the part of the editors, the *CRM* advisors and consultants, or the National Park Service. Send articles, news items, and correspondence to the Editor, *CRM* (2250), U.S. Department of the Interior, National Park Service, Cultural Resources, P.O. Box 37127, Washington, DC 20013-7127; (202-343-3395, Fax 202-343-5260, Internet: ron_greenberg@nps.gov).

Bruce J. Noble, Jr.

CRM in Harpers Ferry National Historical Park

An Overview

Post card published by Walter E. Dittmeyer, Harpers Ferry, WV.

Why do a thematic issue of *CRM* that focuses on a single national park? In part, because it has never been done before. Given that the National Park Service exercises stewardship responsibilities over many of the nation's premier cultural resources, an issue devoted to outlining the manner in which one national park manages its cultural resources seems entirely appropriate. Yet, in another sense, doing an issue of *CRM* because it has never been done before is somewhat like climbing a mountain "because it is there." In other words, a more pragmatic explanation would seem to be in order. Let me provide some background about both the genesis and the aims of this *CRM* issue.

Although most Americans tend to think of national parks in connection with mountains, trees, birds, and animals, all national parks have cultural resources as well. Harpers Ferry National Historical Park is fortunate to have an outstanding mix of both natural and cultural resources. But precisely because this is a national historical park, cultural resource issues tend to figure prominently in daily park management decisions. Historians, archeologists, interpreters, and other cultural resource professionals work closely with the superintendent on a variety of high profile park management issues. Because this scenario may not be typical of all units of the national park system, I would hope that this issue of *CRM* manages to provide some insight into the operational priorities of a national historical park.

Shenandoah Street, Harpers Ferry, in the 1950s before NPS began building restoration activities.

As a national historical park, historical research has always had an important role in National Park Service management of Harpers Ferry. Established in 1944, park development in Harpers Ferry began about a decade later. Park files still bear witness to the work done by park historians in the 1950s to further understanding of John Brown's 1859 raid and the Civil War history that both played prominent roles in the decision to establish Harpers Ferry as a national monument in 1944. Although the park's interpretive focus has now broadened to include new themes such as African-American history, industry, transportation, and environment, the work done by those early park historians continues to shape a portion of our present thinking about Harpers Ferry.

Although historical research was well underway in the 1950s, "cultural resource management," as we presently understand the term, did not really exist in these days preceding the National Historic Preservation Act of 1966. Nevertheless, the park had inherited a number of severely deteriorated buildings and many important cultural resource management issues had to be addressed if these buildings were to be made safe for public visitation. Lacking the present-day legislative and philosophical framework for confronting complex preservation questions, some decisions were made that we would now want to question with the benefit of 20/20 hindsight. For example, the park's original interpretive focus spanned the years between John Brown's raid in 1859 and the conclusion of the Civil War in 1865.

This emphasis led to the unfortunate decision to demolish a number of historical buildings that had been constructed after the 1865 date. While we may bemoan those loses today, it is important to remember that these events took place long before the creation of a National Register program to suggest that any cultural resource over 50 years of age has potential historic significance.

High Street, Harpers Ferry, in the mid-1950s. Sign reading "Danger Old Buildings" provides insight into outmoded NPS management philosophy.

The National Historic Preservation Act introduced new management perspectives to Harpers Ferry National Historical Park and throughout the national park system. In the case of Harpers Ferry, many of those new perspectives are embodied in the park's 1980 Development Concept Plan (DCP). This plan called for an expanded interpretive focus that would include the entire 19th century. Thus, resource preservation would focus on buildings from this entire time period, rather than the narrow emphasis on the 1859–1865 period. Recommendations included in the DCP also led the park to further protect its cultural resources by limiting vehicular traffic in the Lower Town of Harpers Ferry. Because many of Harpers Ferry's most significant resources are located in a flood plain, the DCP led to structural modifications that now enable park buildings to better withstand flooding. Finally, in an early permutation of the "clustering" concept, the DCP emphasized the value of existing cooperative arrangements among all the NPS entities in Harpers Ferry including the park, Harpers Ferry Center, Mather Training Center, and the Appalachian Trail office. Taken collectively, all of these management objectives included in the 1980 DCP have had a significant impact on the park's cultural resource management program.

Despite the undeniable virtues of management plans, they are essentially static documents in an evolving world. This means that the 1980 DCP, like all plans, does not fully reflect current thinking about the park's interpretive and cultural resource activities. For example, in 1996, the park would consider any property eligible for the National Register to be a significant cultural resource. This consideration would not be limited only to resources that date to the 19th century. Furthermore, research has evolved since 1980 and opened new interpretive avenues not recognized at that time. The 1980 DCP makes no mention of Harpers Ferry's role as the site of the Second Niagara Conference in 1906 that brought W.E.B. Du Bois and other prominent African-American leaders to town. The park's appreciation of the significance of that event as a stepping stone to the formation of the NAACP will be reflected in a major celebration of the 90th anniversary of the Second Niagara Conference planned for the weekend of August 24-25, 1996.

Although written plans cannot keep pace with constantly evolving management practices, several aspects of the 1980 DCP remain remarkably relevant today. Many of those enduring topics are reflected in the pages of this issue of *CRM*. With the flood of January 1996 still very much on the minds of park staff, many of the articles in this issue touch upon the park's efforts to cope with floods. Likewise, partnerships are more important than ever today as diminishing federal budgets impact on the ability of the National Park Service to perform its mission. In that sense, Harpers Ferry NHP is both unique and fortunate among national parks to be able to work so closely with

Known as Anthony Hall during Storer College days, this building is now familiar to NPS employees as the Stephen T. Mather Training Center.

continued page 6

Donald W. Campbell

A Place in Time

Thoughts on Harpers Ferry

In 1783, Thomas Jefferson stood on a rock outcrop high above the confluence of the Shenandoah and Potomac rivers and proclaimed that the view was "stupendous and worth a voyage across the Atlantic." The grand view of the water gap that touched Jefferson today offers the often over-stressed members of a complex technological society the healing power of nature as well as a window of memory into a less hectic 19th-century community. Gaze about Harpers Ferry from any of its varied vantage points and the abundance of sensory stimuli enter the soul like so many rivers into a sea. Annually, a half-million tourists visit Harpers Ferry National Historical Park to enjoy this picturesque scene of nature and community captured on canvas by early artists such as Rembrandt Peale, and later artists like Garnet Jex.

I often wonder what it is that people love about Harpers Ferry and once having visited Harpers Ferry, what it is about this place that invariably makes them return. One answer is visitors are captivated by the intrinsic nature of Harpers Ferry and stirred to soulful thoughts from their contact with the cultural fabric of the community. This fabric is a rich blend of human history and splendid scenic beauty, both coarsely and finely woven over time. It is the cultural history of the Algonquins, of 250 years of early-American settlement, of local events that divided and drew together a nation, and of a community in microcosm that mirrors who we are as a people.

Harpers Ferry interests visitors because it is and is not what it seems—a dichotomy of sorts. The community is the quintessential Jeffersonian town, where everyone knows his neighbor and lives in a blessed state of harmony. Or is it? The community is frequently described by visitors as quaint and charming, a movie set of sorts, but cultural memory like an artesian well flows from the depths of Harpers Ferry and spews and splashes tumultuous history in every direction, flooding the town. The attractively restored community appears to be an art form, but its character crafted over 200 years is genuine. This contrasts with today's creations of historic villages in theme parks where reality for the visitors is blurred, not only in the false facades of recreated towns, but also where the history presented is obscured from where it happened. For the park visitor, Harpers Ferry's sense of place is the place and its integrity is intact. The town is pure Americana carefully preserved in a National Register Historic District and National Historical Park.

Yet there is more, a mystery to Harpers Ferry, that is a kind of yin-yang. The whole of the place consists of forces counteracting each other in a harmony of history that is held in constant tension. Nature verses man, rivers verses mountains, preservation verses development, north verses south, abolitionist verses slave holder, laws of God verses laws of man, craftsman verses machine, railroad verses canal barge and so forth.

Harpers Ferry is also a sacred place and hollowed ground. You walk where your ancestors walked, where epic events occurred in the forging of this nation and a cultural record remains as truth of sacrifice in another time. You see what your progenitors saw, you touch what they touched, you travel backwards in time to the roots of your heritage, your country, and perhaps find insight into who you are. Harpers Ferry also has a magical and mystical quality. If you listen quietly to this landscape, you hear an abundance of nature sounds in the flowing rivers, wind in the trees, and varied wildlife. But there is more. Mixed with these natural sounds are the voices of cultural memory of the Algonquin, of Washington, Jefferson, Lincoln, Lewis, Brown, Douglass, and so many others speaking to park visitors across time.

Housetops, 1925. Post card from an oil painting by Garnet W. Jex (1895–1979). Harpers Ferry Historical Association; Eric Long Photography, Gaithersburg, MD.

Harpers Ferry sings its haunting song—in the mountains, rivers, and buildings—summer, winter, spring, and fall. It beckons; it calls and causes us to be good educators and stewards of this place in time—Harpers Ferry.

I invite you to read the pages in this issue of *CRM* to gain additional insight into the ways that we have carried out our educational and stewardship responsibilities at Harpers Ferry National Historical Park.

Donald W. Campbell is the Superintendent at Harpers Ferry NHP.

continued from page 4
several NPS partners located here in the same small community. However, the articles in this issue indicate that the park's partnering efforts reach well beyond the park to embrace other important partners such as the Williamsport Preservation Training Center, the Denver Service Center, and the West Virginia State Historic Preservation Office. The park's excellent working relationship with the Harpers Ferry Historical Association is also reflected in Dave Gilbert's article about the cooperative development of the park's World Wide Web (WWW) homepage.

Speaking of the Web, the 1980 DCP could never have envisioned the explosion of personal computer applications over the past decade. Harpers Ferry NHP has been fortunate to be able to ride that technological wave as well. Not only have the park's interpretive programs been advanced through a very successful WWW homepage, but also the park has benefitted from the development of several PC-based research tools discussed in Patricia Chickering's article. A computerized inventory of the park's collection of 2,000 historical photographs has proven to be an invaluable management tool that enables staff to link descriptive text with images that appear on the computer screen with astounding clarity. In addition, the park's historical and archeological research program have both made effective use of a database system which includes a summary of articles from three local newspapers with entries dating back to the early 19th century.

The Interpretive Design Center building is the headquarters of Harpers Ferry Center, another important partner of Harpers Ferry NHP.

Although computers have changed the *modus operandi*, research remains as important to Harpers Ferry National Historical Park today as it was in the 1950s. Unlike some battlefield parks that interpret a span of history that may be limited to only a few hours or days, Harpers Ferry must cope with the need to document the town's role in the national spotlight from the time that Thomas Jefferson visited in 1783 up until the convening of the Niagara Conference in 1906. Part of the excitement of working in Harpers Ferry is the multitude of research topics which remain unexplored, but the immensity of this task is also a major challenge. This challenge is compounded by the difficulty of bringing the park alive for visitors when the armory, the arsenal, and the industrial facilities which once stood on Virginius Island have all been destroyed through the combined impact of the Civil War and raging flood waters. The articles by Paul Shackel and Steven Lowe demonstrate the way that archeological and cultural landscape research have helped to animate resources that are no longer extant in the park today.

In summary, I would hope that this issue of *CRM* will serve as a gauge for measuring the current status of cultural resource management activities in the National Park Service. I also believe that state and local park managers will find topics of interest in this issue. Harpers Ferry National Historical Park would certainly not pretend to have all the answers about a very complex field like cultural resource management, but hopefully we have learned what questions to ask. We draw closer to our ultimate resource preservation goals by seeking answers to our questions. If this issue of *CRM* has raised questions in your mind about our cultural resource program here in this park, feel free to bring your questions to me or the other authors represented in the following pages. Even better yet, perhaps this issue has stimulated you to think about providing editor Ron Greenberg with additional *CRM* articles on subjects pertinent to other national, state, or local parks. In any event, please read this issue with an eye toward enjoyment and education. I believe that you will find some of each in every article.

Bruce Noble is Chief, Interpretation & Cultural Resources Management, Harpers Ferry National Historical Park.

Photos courtesy Harpers Ferry NHP.

Peter F. Dessauer

The Architectural Program of Harpers Ferry NHP

Evolution, Accomplishments, Expectations

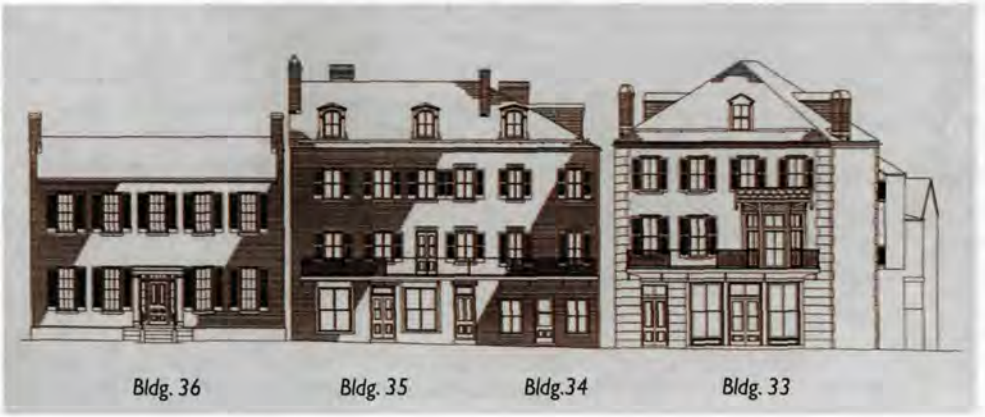
During the past 40 years (1956–1996) Harpers Ferry National Historical Park (Harpers Ferry NHP) has been engaged in a concerted effort to preserve its architectural resources for public interpretation. Historic buildings, landscape features, and ruin sites which were previously unsafe, dilapidated, or off limits are now open to the visitor after the completion of ambitious projects. According to the program schedule, the Shenandoah Street buildings (1996) are in a state of stabilization and almost completely restored. The interpretive scope is expanding preservation efforts beyond the heavily visited Lower Town into Virginius Island, the Potomac River cultural resources, and to the Upper Town on Camp Hill. New Parking and Visitor Center Facilities on Cavalier Heights accommodate the 500,000 visitors who come to Harpers Ferry NHP each year. Plans for future design and construction activities continue and are scheduled beyond the year 2000 into the first decade of the 21st century.

Harpers Ferry NHP project accomplishments have forged strong bonds between the park and the NPS Service Centers. The park's cultural resource, maintenance, and administration staffs have been working closely with the Denver Service Center, Williamsport Preservation Training Center, Harpers Ferry Center, and HABS/HAER (just to name a few partners) during planning, field research, design, and construction phases of the park's architectural development for more than 20 years (see box). The park has an advantage in that most of the offices listed above are within an hour's drive of Harpers Ferry, thus generating a relatively rapid response for project needs. Therefore, design and construction related cultural resource services are possible from several local sources.

Associated Professional Offices

- Denver Service Center (DSC)
- Williamsport Preservation Training Center (WPTC)
- Harpers Ferry Center (HFC)
- Northeast Cultural Resource Center (NECRC)
- National Capital Area Systems Support Office (NCA)
- Historic American Buildings Survey (HABS)
- Historic American Engineering Record (HAER)
- West Virginia University's Institute for Historic Technology and Industrial Archaeology
- WASO—NPS Washington Office
- A&E Firms—From NCA, DSC, and/or in contract with the park for Engineering, Architectural, and hazardous waste consulting services.
- State Historic Preservation Offices—from the States of Maryland, Virginia, and West Virginia.

The park also has the benefit of a multi-disciplinary cultural resources staff which includes expertise in the areas of history, curation, archeology, and landscape architecture. The availability of these staff members allows them to play active roles in the architectural program by accomplishing certain parts of project work in-house and participating in the lengthy review processes for work contracted to the allied professional offices. Having an architect on site in the park has also helped to achieve a har-



Shenandoah Street rehabilitation—Package 116. Preservation construction, 1994–1996. Drawing by Archie Franzen.

mony between design plans and construction activities. In so doing, the park has saved an enormous sum of money that would otherwise have been spent on taking plans developed outside the park and revising them to suit local conditions.

The Harpers Ferry NHP Architectural Development Program is organized into a system of Packages, each with a separate "Development/Study Package Proposal" (the 10-238 form for park projects) and identification number, and comprised of clusters of building groups, landscape features, or specific ruins needing stabilization. Each Package is scheduled and funded according to the necessary phases and steps including research, archeology, historic landscape reports, historic structures reports, measured drawings of existing conditions, artifact and materials conservation, exhibits, historic furnishings, 106 compliance, planning, engineering, preliminary design, contract documents, contracting, construction, and post construction. The park's Architectural Projects necessarily involve a wide variety of different professionals committed to a "total approach" method dedicated to creating a thorough process for a complete product. It is no wonder then that these Packages are planned for a duration of many years, typically spanning 4-5 years from the inception of 10-238 and appropriation of funds from Congress up to final completion of construction, exhibits, and public admission.

From the list in the box, Packages 114, 115, and 313 are finished. Package 116 is under construction and scheduled for completion by summer 1996, with exhibits and historic furnishings to follow thereafter. Packages 118, 123, and 320—portions of these projects have been completed, and subsequent phases are being planned for the future whenever funding becomes available.

Harpers Ferry National Historical Park is in many ways a laboratory of evolving architectural restoration techniques. During the park's 52 years three or four separate generations of professionals have influenced its attitudes toward architectural preservation. During the 1940s and 1950s there was a concerted effort to demolish all old dilapidated buildings within the park boundaries declared unsafe or unsuitable for the adopted interpretive period of 1859–1865. The time of 1955–1975 might be considered the Harpers Ferry NHP "Reconstruction & Restoration Age," when the date of 1859—the year of the John Brown Raid—became the recreative focus for all proposed and accomplished park projects. The late 1970s inaugurated the period of "Rehabilitation & Restoration," where buildings were converted to exhibits and furnished scenes on the first floors, working offices and utility rooms above, and the exteriors repaired to assume a 19th-century appearance which would safeguard most of their existing features from that time. (An example of this philosophy is seen in Package 110 which houses the park's John Brown Museum located at the corner of Shenandoah and Potomac streets.)

However, beginning in the early 1990s there has emerged another current strongly in favor of "Preservation & Stabilization" with intent to limit

Major Harpers Ferry NHP Architectural Packages which are either finished, or under construction, design, and planning at present.

Package 110: Rehabilitation of Buildings 8, 9, 10, 11, 11A, 12, and 12A, with mechanical system in 16A; Lower Town.

Package 114: Cavalier Heights Visitor Center, Park Entrance Road, Visitor Parking Area, and Bus Storage Facility; surrounding landscape.

Package 115: Rehabilitation of Buildings 3, 14, 27, 28, 40, and 43 in Lower Town.

Package 116: Rehabilitation of Buildings 32, 33, 33A, 34, 34A, 35, and 36 and surrounding landscape, south side of Shenandoah Street, in Lower Town.

Package 118: Preservation and Stabilization of Buildings 5, 7, and 16/16A and immediate surrounding landscape in Lower Town.

Package 119: Preservation and Rehabilitation of Buildings 44 and 45, Lower Town; and Buildings 56, 57, & 58 with landscape, Upper Town.

Package 123: Stabilization of Historic Industrial Ruins on Virginius Island.

Package 212: Stabilization of Historic B&O Railroad Bridge Piers Ruins in the Potomac River.

Package 313: New John Brown Museum Facility; Buildings 9, 10, and 11, Lower Town. Harpers Ferry NHP 50th Anniversary Project - July 2, 1994.

Package 320: Landscape Development for Lower Town, Virginius Island, and park general.

Cyclical Maintenance: Annual repair and replacement projects from regional appropriations, affecting any park buildings or utilities prioritized by park maintenance.

Flood/Storm Recovery: Repairs to Lower Town buildings and exhibits are necessary in the aftermath of the January 1996 flooding. Prioritize and enact Packages 123 and 212 to finally stabilize and protect the river shoreline ruins which are so susceptible to flood damages.

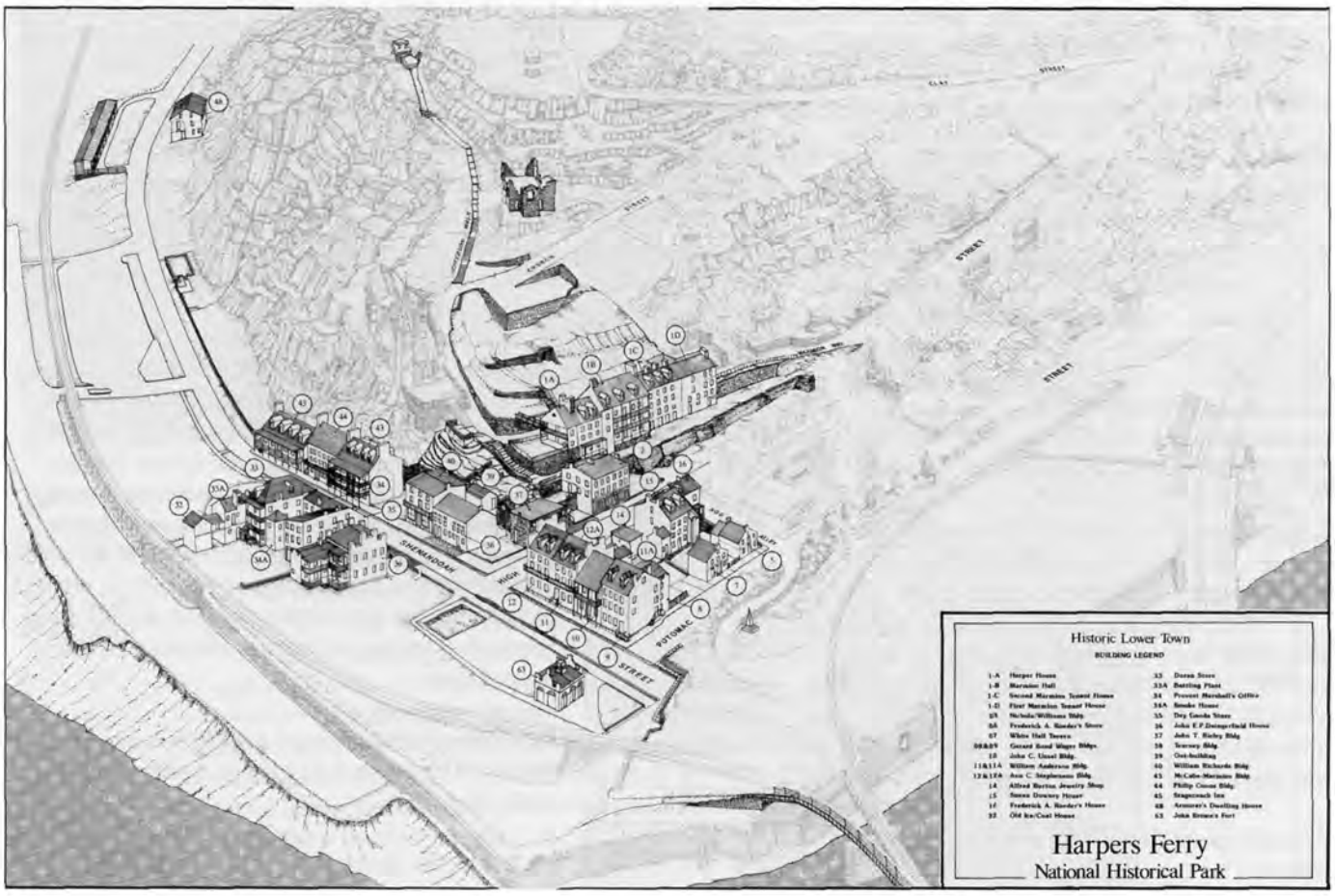
(see map, page 9)

Package 116, Sept. 1995. Construction work in progress on buildings 32, 33A, 33, 34A, 34, 35, and 36, Lower Town.

intervention. This ethic of stabilization might be a response to the recent climate of fiscal restraints and lower expectations for future government funding. However, it may also be explained as the proper responsible policy toward the remaining resources not as yet affected by project work, which include many ruins (Packages 123 and 212) and small historic buildings (Package 118) with precious 19th-century finishes.

There are now two active project packages underway in Harpers Ferry Lower Town—Packages 116 and 118, which respectively represent the philosophical approaches of "Rehabilitation & Restoration" and "Preservation & Stabilization." The events of these project packages are good examples of the teamwork between the park and NPS professional offices. Any article about the park's Architecture Program as it exists today would not be complete without a description of these two Packages.

PACKAGE 116: The construction costing a gross $6.1 million, Package 116 is the largest project ever undertaken in Harpers Ferry NHP and one of the most challenging of the 1990s in the National Park Service. This is an eight-year effort, dating from the issue of the 10-238 in 1989 until formal opening of the exhibits in 1997, which seems to include some of everything possible for a large scale Rehabilitation & Restoration of seven buildings such as renewal of decaying building fabric; restoration of building exteriors to the late 1800s appearance; interior rehabilitation with new elevators, handicapped accessibility, plumbing, electrical, sprinkler, fire and security alarms, and HVAC all to meet code; new or updated interior exhibits, historical furnishings, and office spaces; and exterior landscaping sympathetic both to the historic scene, historic materials, and public accommodation. This project is and has been a titanic effort with a host of professionals from



Package 116, Sept. 1995. Masonry restoration in progress on buildings 32 and 33, Lower Town.

Harpers Ferry NHP, Denver Service Center, National Capital Region (now SSO), Harpers Ferry Center, and various allied A&E firms.

PACKAGE 118: Much less ambitious in scope when compared to Package 116, the three small buildings in Package 118 (5, 7, and 16/16A in Lower Town) do not have the square foot areas capable of multiple reuse and contain so much valuable early to mid-19th century fabric that stabilization for preservation intact has been adopted. Here the park and the Williamsport Preservation Training Center aim at conservation of all the delicate building materials—specifically interior plaster, exterior stucco, paint, and graffiti—in order to maintain as much as possible the "virgin" condition of the remains. Much of previous preservation work on the three buildings from the 1970s and 1980s was done inadequately, either never achieving its intended purpose or never finished. The scope of Package 118 will be to finish the repair of existing building problems, limit the intrusion of new electrical and Life Safety features, restrict public access and personnel use, and provide simple furnishings for interpretation. This effort to preserve the buildings by stabilizing them and limiting more intrusive forms of fabric intervention represents a fundamental change in direction for the park's architectural program.

Map of the Lower Town showing a portion of the old armory grounds along the Potomac River. Map produced by the Harpers Ferry Historical Association.

Harpers Ferry National Historical Park will be very busy over the next five years with its program of recovery from the 1996 flood and work on existing and proposed Construction Packages. Looking beyond these projects, Harpers Ferry NHP can branch out in several new directions for future work. New opportunities for architectural work exist in the area of the armory grounds along the Potomac River, on Camp Hill where there is enormous potential for the restoration and interpretation of Storer College which played an important regional role in educating African-American students, and on Cavalier Heights where the park would relish the chance to expand its visitor center facilities. The emphasis at the beginning of the 21st century will be to move restoration and development projects outside of the heavily visited Lower Town and into other areas of the park. There are many historical sites on the park perimeter which are in need of protection and restoration designed to improve visitor access.

Package 119, which includes the park's "Crown Jewel" Greek Revival buildings on Camp Hill that presently house park headquarters and professional staff offices, represents yet another exciting future restoration opportunity for the park. The scope, schedule, and cost of 119 will probably equal what the National Park Service has experienced with Package 116, the precedents of the latter establishing a foundation of experience which will improve park planning. To date, the Historic American Buildings Survey (HABS) has completed 60 mylar sheet measured drawings of buildings 45, 48, 56, 57, and 58, during two summer field seasons, 1994 and 1995. With HABS documentation, the Package 119 buildings are on record until the time within the next decade when, hopefully, funding will permit attention to their preservation.

Peter Dessauer is a licensed architect on loan from the NPS Denver Service Center to Harpers Ferry NHP since 1992.

Photos by the author.

Steven M. Lowe

Using Cultural Landscape Reports

View from Maryland Heights looking up the Shenandoah River toward Virginius Island, c. 1895.

The boundaries of Harpers Ferry National Historical Park include 2,287 gross acres located at the junction of the Shenandoah and Potomac rivers. The park encompasses land in West Virginia, Maryland, and Virginia. To properly administer and preserve the park land consistent with National Park Service (NPS) standards, a number of documents exist that outline acceptable management procedures. Documents that are frequently consulted for landscape management are the park's 1980 Development Concept Plan, the *Secretary of the Interior's Standards for the Treatment of Historic Properties, Guidelines for the Treatment of Historic Landscapes,* archeological reports, Historic Structures Reports, and Historic Furnishings Reports, just to name a few. However, two Cultural Landscape Reports (CLR) stand out as essential tools in the effective management of cultural landscapes within Harpers Ferry National Historical Park. Before continuing with further discussion about the CLRs and how they are used by the park, it is first necessary to understand how and why these CLRs were created.

Virginius Island from Jefferson Rock, 1865.

Photos courtesy Harpers Ferry NHP.

Chapter 7 of the *Cultural Resource Management Guideline* (NPS-28) outlines the recommended NPS management procedures for cultural landscapes. According to NPS-28, "a cultural landscape is a geographic area, including both natural and cultural resources, associated with a historic event, activity, or person." NPS-28 recognizes four cultural landscape classes: historic designed landscapes, historic vernacular landscapes, historic sites, and ethnographic landscapes.

In the process of applying this terminology to Harpers Ferry NHP, 10 distinct cultural landscapes have been identified and they are categorized as historic vernacular or historic site landscapes. These landscapes are Bolivar Heights, Cavalier Heights, Camp Hill, Virginius Island, Lower Town, Halls Island, the Armory Grounds, Short Hill, Maryland Heights, and Loudoun Heights. As of this time, CLRs have been prepared for both the Lower Town and Virginius Island.

In addition to NPS-28, other NPS guidelines come into play in the process of managing cultural landscapes within Harpers Ferry NHP. Where Harpers Ferry's historic landscapes merge with mountains, forests, and rivers, the Natural Resources Management Guidelines embodied in NPS-77 are also consulted in the process of managing the natural resources on the landscape. As is true in all national parks, landscape management in Harpers Ferry NHP is a true interdisciplinary effort involving both cultural and natural resource issues. Harpers Ferry NHP is also like other national parks in that Section 106 consultation with the State Historic Preservation Office is mandated in cases where current park projects have the potential to impact cultural landscapes. However, aside from the more general Servicewide efforts to adhere to the tenets of NPS-28, NPS-77 and the Section 106 process, the staff of Harpers Ferry NHP seeks cultural landscape management direction from the park's two Cultural Landscape Reports.

Interdisciplinary teams with backgrounds in landscape architecture and history were assembled

to produce the park's Cultural Landscape Reports. The core team that developed the CLR for the Lower Town district of Harpers Ferry NHP was led by Historical Landscape Architect Cathy Gilbert (NPS, Pacific Northwest Region), Project Landscape Architect Maureen Joseph, (NPS, Denver Service Center, Falls Church Office), and Project Historian, Perry Wheelock (University of Maryland). This became the park's first completed CLR. The length of this project from inception to publication took approximately one year to complete at a cost of $100,000.00 dollars.

A second CLR for the park's Virginius Island area was developed and led by Landscape Architect, Maureen Joseph, Project Landscape Architect Deborah Warshaw (University of Maryland), Project Historian Perry Wheelock, and Landscape intern, Andrew Kriemelmyer (West Virginia University). The second CLR project entailed one year as well at a cost of $75,000.00 dollars.

These Cultural Landscape Reports evolved because Superintendent Campbell recognized the significance of the complex cultural landscapes within the park and sought the development of CLRs to provide a body of data that would assist with the management of these valuable resources. With cultural landscape studies deemed a priority, decisions concerning which landscapes to study first needed to be resolved. This was done using factors such as the condition and type of cultural and natural resources within a given landscape, safety considerations, visitor impact potential, major interpretive themes interwoven in the landscape, and cost. At the time, the availability of staffing and funding allowed for the speedy development of the CLRs.

The Cultural Landscape Reports written for Harpers Ferry NHP are technical reports which include maps, plans, drawings, sketches, and photographs. The CLR is broken down into the following basic categories: introduction, existing conditions, landscape history, analysis, evaluation, design development, appendix, and bibliography. In short, the CLR proposes design objectives, treatments, and recommendations for the park professionals and the maintenance staff to refer to and follow for years to come. It is an important and necessary tool to be used by current and future employees who will influence the preservation, development, and management of the park's landscapes. The CLR basically serves as baseline data which the park staff can return to again and again to make sure that proposed developments are planned in a manner compatible with the park's cultural landscape features.

The availability of a CLR aids immeasurably in the management of the park's cultural landscapes. Recent experiences with flood damage to Virginius Island provide graphic evidence of this fact. This episode began in early January of 1996 when record snow fell throughout much of the northeastern United States. This snow was later followed by several days of heavy rain that led to rapid snow melt that culminated in severe flooding in Harpers Ferry between January 19–21. The Potomac River crested at 29.4', making it one of the four most severe floods in Harpers Ferry history.

Located on the banks of the Shenandoah River just above the point where it joins the Potomac, Virginius Island was completely submerged during the catastrophe. Heavy damage was done to the island in the form of large natural and manmade debris deposits, serious road and trail erosion, further historical ruin destruction, wayside removal, and significant vegetation loss. As nature designed, the brunt force of swift waters from the Shenandoah River exacted a heavy toll on Virginius Island.

Virginius Island flood damage, 1996. Flood waters removed the paths and trails leaving deposits of silt over the landscape and ruins. Photo by Peter F. Dessauer.

Between the early 1800s and the total devastation wrought by the 1936 flood, the 13-acre island was a booming industrial community that exhibited row houses and single family dwellings, numerous mills, workshops, roads, bridges, a canal, and a railroad line that still operates today. This dense and bustling community housed a mixture of government and private armory employees

skilled in the production of thousands of rifles and muskets for the U.S. military, and employees for other private mill enterprises such as flour, cotton, and sawmills. Much of the island's manufacturing capability was seriously diminished by the havoc of the Civil War. The 1936 flood delivered the final blow to this small industrial island. By 1953, when Harpers Ferry was purchased by the National Park Service, both the island and the town were in serious decline.

Virginius Island flood damage, 1996. Damaged brick masonry walls over cotton/flour mill ruins.

Photos by Peter F. Dessauer.

In the process of completing the CLR for Virginius Island, the document emerged as a source of information that identified the locations of long-missing structures, roads, and railroad lines. This documentation enabled park staff to map out and restore many Virginius Island roads. Archeologists also used CLR data to help locate ruin foundations and then implemented the CLRs management recommendations by accentuating the ruins with vegetation management techniques. The CLR also served as a body of knowledge that assisted with the construction and reconstruction of bridges, the repointing of ruins, the planting of trees, and the installation of 14 wayside exhibits at points of interest throughout the island.

Having a CLR that described the pre-flood state of Virginius Island provided a quick and comprehensive information source to use in the post-disaster recovery process. The report was physically taken to damaged locations to reinstall waysides; relocate trail, road, and ruin perimeters; and to reestablish topography grades. The photographs, maps, and narratives, within the CLR gave immediate visual evidence demonstrating how the damaged landscape looked prior to the flood and how it should look after the completion of repairs.

Virginius Island flood damage, 1996. Flood debris and damaged masonry in the turbine pit of the cotton/flour mill ruins.

As of yet, the remaining eight distinct landscape components of Harpers Ferry NHP do not have CLRs written to assist with their management. When a project is proposed within an area that lacks a CLR, the park's landscape architect has the responsibility to research and design a solution to the problem. Not only does this require the completion of Section 106 documentation and consultation with the State Historic Preservation Office, but also the park staff must engage in time consuming research to determine the historic character of the landscape to be impacted by the project. In cases where a CLR has already been completed, the research information and several design alternatives will already exist. Needless to say, this results in significant time savings for the park. Over the long term, the initial expense of completing a CLR is more than made up by the time and money saved in designing and planning projects that are compatible with the cultural landscape.

The Cultural Landscape Reports provide readily available research information, design alternatives, and preservation objectives to follow during the development of future projects. CLRs include historical data, concepts, and design treatments that are immediately available for use in managing the landscape. The CLR is not the only information source needed for the effective management of a distinct landscape. It is, however, an official document packed with good information that expedites planning and development activities that promote the overall preservation of a specific cultural landscape.

Steven M. Lowe is the Landscape Architect at Harpers Ferry NHP. A captain in the U.S. Army Reserves, Steve is currently on extended leave from the park as he participates in "Operation Joint Endeavor" in Hungary.

Bruce J. Noble, Jr.

The Flood of 1996

Opportunities for Interpretation and Training

Flooding along Shenandoah Street in Harpers Ferry Lower Town on January 20, 1996. Photo by the author.

In my 19 months at Harpers Ferry National Historical Park, I have come to believe that it is among the most favorably located of all national parks. Harpers Ferry NHP is a delight for both the historian and the interpreter with over 200 years of post-contact history featuring dramatic events like John Brown's raid and including such noteworthy individuals as George Washington, Thomas Jefferson, Meriwether Lewis, Abraham Lincoln, Frederick Douglass, and W.E.B. Du Bois. From an administrative standpoint, the park's location also has many advantages. For example, it is close enough to Washington, DC to take advantage of the expertise found in the National Capital Area SSO and also in the Washington Office. At the same time, the 65 miles between the park and Washington, DC provides a welcome respite from some of the trials of living and working in a major metropolitan area that also happens to be the nation's seat of government. The park receives additional benefits from its proximity to the talent found in other neighboring NPS offices: Harpers Ferry Center, Mather Training Center, and the Appalachian Trail office. Last but not least is the scenery found at the junction of the Shenandoah and Potomac rivers with mountain peaks rising over 1,000 vertical feet above the water. In a nutshell, the location is hard to beat.

Yet this idyllic location is not without peril. The scenic and tranquil rivers that do so much to define the character of Harpers Ferry also have a tendency to flood on occasion. In fact, the rivers overflow their banks with a remarkable degree of regularity. Going back only as far as the mid-19th century, major flood events have occurred on over a dozen occasions. Aside from a few lengthy gaps, floods have inundated Harpers Ferry roughly every 10 years or so. With over a decade having passed since the last flood in 1985, Harpers Ferry was due for another at any time.

A combination of naivete and optimism led me to believe that no flood would occur during my time of employment in Harpers Ferry. Why not be optimistic? Over three decades passed between the 1889 and 1924 floods. Perhaps the park would experience this kind of lucky dry spell once again. Such was not to be the case.

On January 18, 1996, unseasonably warm weather caused the rapid melting of snow remaining from the Blizzard of 1996 which had paralyzed the East Coast a few weeks earlier. In this single 24-hour period, roughly 2' of snow melted down to the bare earth. Despite this swift loss of snow cover, there did not seem to be an immediate cause for alarm. The river forecast on January 19 called for the water to crest at 21.6'. This would leave the peak river height safely below the 23.6' level necessary to send water into park buildings. As a precautionary measure, the park staff received notification that we had been placed on flood stand-by and that we could be called in to work if the water exceeded the predicted crest.

At 12:30 a.m. on January 20, a ringing telephone jolted me out of bed. The river had reached the predicted crest 12 hours earlier than anticipated and the water was still rising. The dreaded moment had arrived: it was time to begin calling park staff into work to evacuate exhibits and

Aerial view of flooding in Harpers Ferry Lower Town on January 20, 1996. Photographer unknown.

buildings in the flood plain. Thus began the most surreal experience of my 10 years in the National Park Service.

A flurry of activity took place that night as staff from the park, Harpers Ferry Center, and the Harpers Ferry Historical Association, along with WASO personnel duty-stationed in Harpers Ferry, joined together to form a small army of about 100 people intent on outracing the rising flood waters. Approximately 26 historic buildings owned by the park are within the flood plain. At least 10 major museum exhibits are housed within those buildings. Armed with a flood plan and knowledge of the order in which water would enter the buildings, we began the difficult evacuation process.

By the following morning, we were driving pickup trucks through hubcap-deep water to load them with museum exhibitry. Despite the onset of exhaustion and frayed nerves, we accomplished our task. Dealing primarily with exhibits that had been designed to disassemble easily in the event of a flood, we managed to evacuate all park buildings before rising water entered them. Although our exhibit displays and objects were secure, the water would not be denied entry. The river ultimately crested at 29.4' and reached a depth of almost 6' in certain park buildings. As might be expected, buildings suffered severe structural damage. The final repair figure for Harpers Ferry NHP was placed at $3.2 million.

Secretary of the Interior Bruce Babbitt visits Harpers Ferry NHP on April 17, 1996.

Once the water receded, the real work began. Buildings and streets had to be shoveled clear of mud, debris had to be removed, dangling tree limbs were pruned, and buildings had to be disinfected and sanitized. This task required a mammoth contribution on the part of park staff and numerous volunteer groups. Within a week, the park was reopened to the public on a limited basis. Much had been accomplished, but the lean budgetary times provided no assurance that the park would receive the millions of dollars needed to address the significant structural damage to numerous park buildings.

In terms of securing the funding necessary to return the park to its pre-flood condition, Interior Secretary Bruce Babbitt proved to be an invaluable ally. Secretary Babbitt lives near the C&O Canal in Washington, DC, and he took great personal interest in formulating an effective response to flood damage along the Potomac River. Within a week of the flood, he visited Harpers Ferry as part of a tour up the Potomac to assess damage to the C&O Canal. On April 17, he returned to Harpers Ferry once again as the starting point for his 61-mile walk into Washington, DC along the C&O Canal. Both of these visits, along with assistance from Senator Robert Byrd and Congressman Bob Wise, attracted attention to the damage sustained in Harpers Ferry NHP. The efforts of these prominent individuals helped the National Park Service to secure an emergency appropriation from Congress that would assist with flood recovery efforts in parks along the Potomac and in the Pacific Northwest.

The aftermath of the flood presented the park with other dilemmas. For example, how could the flood be effectively interpreted to the public? In a sense, the success of our clean-up efforts hampered our ability to interpret the flood to park visitors. We managed to clean-up so quickly that much of the most visible evidence of the flood had been eliminated within a few days after the water retreated. Clearly something had to be done to capitalize on the public's curiosity about the impact of the flood. This need was even more imperative, given that floods comprise an important aspect of one of the park's six primary interpretive themes: environment.

In our efforts to interpret the impact of the flood, we received immeasurable assistance from our National Park Service neighbors at Harpers Ferry Center (HFC). At the request of the superintendent, Michael Paskowsky used the resources of HFC to develop an outstanding flood video that was then provided to the park's congressional delegation. This flood video was later supplemented by other film footage taken by HFC personnel and used as the cornerstone of the park's flood exhibit. The decision was made to locate this temporary exhibit in the entryway to the park's John Brown Museum which had sustained serious damage during the flood. Visitors could watch the flood exhibit, view the high water mark demarcated on the museum wall, read about the damage in newspaper stories incorporated into exhibit panels, and actually see the peeling paint and warped floors remaining in the wake of the flood. To partner

Left: View of Shenandoah Street during the 1924 flood. Right: Street scene from 1942 flood; photo by Edwin A. Fitzpatrick, courtesy Harpers Ferry NHP.

with the public, we also placed the park's donation box in this temporary exhibit. This entire exhibit cost the park only about $200, but did a great deal to educate visitors about the ongoing role that floods play in Harpers Ferry history.

On a variety of levels, all natural disasters serve as learning experiences. Some of the lessons learned are both harsh and tragic. Other lessons, however, are more positive. Having experienced a flood in 1996, Harpers Ferry National Historical Park will be better prepared to deal with future floods. The park will update its flood plan and take other steps to incorporate what we have learned into our standard operating procedures. Although I do not relish another bout with rising water, I feel confident that the park will always deal more effectively with the next flood than we did with the last.

My final point would be to briefly compare the way that the National Park Service responds to fires and floods. The Service has an important, and very necessary, wildfire suppression program. To my knowledge, no similar program exists for dealing with floods. Though several months remain before this year ends, 1996 has already demonstrated the enormity of Servicewide flood hazards with over 50 million dollars of water damage sustained by national parks in the East and the Pacific Northwest. Damage of this magnitude seems to call for an extensive training program designed to address the many flood dangers encountered throughout the national park system. After a year like this one, I would venture a guess that there would be no shortage of interest in such a training activity.

Bruce Noble is Chief, Interpretation & Cultural Resources Management, Harpers Ferry National Historical Park.

Minié Bullet Drawings from Harpers Ferry Armory Debut on WWW

An exhibit of rare and finely detailed drawings from the Harpers Ferry Armory has made its debut on the World Wide Web. The "Burton Collection Online Exhibit" is named for James H. Burton, who served as foreman, Assistant Master Armorer, and Master Armorer at Harpers Ferry between 1842–1854. Burton's signature appears on several drawings in the collection. Burton later served as superintendent of the Richmond Armory, where his complete familiarity with the machinery for manufacturing United States firearms proved indispensable for the Confederacy.

The Burton drawings were discovered in 1984 in a basement crawl space in Winchester, Virginia. The drawings were subsequently purchased by the Harpers Ferry Historical Association, who donated them to the museum collection of Harpers Ferry National Historical Park. In addition to drawings detailing the evolution of the minié bullet, the collection contains illustrations of armory buildings, furnaces, lock mechanisms, machine tools, musket and rifle sights, rollers, and waterpower works.

The "Burton Collection Online Exhibit" is the result of a cooperative effort between Harpers Ferry National Historical Park, the Harpers Ferry Historical Association, and the Smithsonian Institution's Office of Printing & Photographic Services. The exhibit is located on the Harpers Ferry National Historical Park Home Page. The World Wide Web address is <http://www.nps.gov/hafe>.

For more information contact Marsha Starkey, Harpers Ferry National Historical Park <Marsha_Starkey@nps.gov> or Dave Gilbert, Harpers Ferry Historical Association <dgilbert@intrepid.net>.

Thomas A. Vitanza

A Confluence of Goals, Employee Development, and Resource Preservation

Since 1985 there have been no less than 30 workshops, seminars, or preservation-related projects completed at Harpers Ferry National Historical Park by the Williamsport Preservation Training Center (WPTC). These activities have ranged widely in scope from the total restoration of a significant 19th-century structure to the painstaking repair of a historic dry laid masonry wall; from the development of preservation maintenance work task procedures for the park-wide Inventory Condition and Assessment Program (ICAP) to the completion of Historic Structures Reports for individual buildings in the historic Lower Town National Register district. Integrated into every one of these efforts is the work-centered preservation training of National Park Service employees and the completion of part of the cultural resources program at the park. With each project averaging 8 participants it is not unreasonable to claim that over 240 employees have benefited from this partnership.

Masons from WPTC and the Southeast Preservation Crew participated in the reconstruction of the Burton Jewelry Store foundation.

As most people know, Harpers Ferry National Historical Park and Harpers Ferry, West Virginia are located at the dramatic merger of two great rivers, the Shenandoah and the Potomac. The historic lower town of Harpers Ferry NHP has also been the venue for the confluence of two National Park Service goals. The preservation of cultural resources and the work-centered preservation training of National Park Service maintenance and cultural resource employees have been successfully joined through the creative efforts of the two organizations. WPTC and Harpers Ferry NHP had forged a working relationship providing mutual benefits to each partner well before the current and well-deserved emphasis on partnerships as a means of achieving common goals. The recent reorganization of the USNPS has, in fact, placed an emphasis on this "sharing" between units of the system.

WPTC is the primary National Park Service training center for work-centered preservation and craft skills programs. As such, we work with park management and staff to creatively achieve park-oriented preservation maintenance programs. This has resulted in the implementation of numerous cultural resource projects throughout the park. Most of these are "bricks and mortar" projects, although several planning/design projects have also been completed.

One of the more notable preservation projects completed as a result of this partnership was the reconstruction of the historic (1857) Alfred Burton Jewelry Shop in lower town. This was a design/build project and included everything from research for the Architectural Data section of the Historic Structures Report to complete architectural drawings for the reconstruction of the small

Williamsport Preservation Training Center

The role of the Williamsport Preservation Training Center (WPTC) is to support the preservation and maintenance of historic properties in the National Park Service by providing a comprehensive program of preservation education and work-centered training. WPTC uses historic preservation projects as its main vehicle for instructing preservation philosophy, building crafts, building technology, and project management skills.

wood frame building. It also included coordination with Harpers Ferry Center for installation of exhibits, and the reconstruction of the building using NPS maintenance employees from throughout the Service.

The WPTC historical architect conducted the research, investigated and planned the conservation of the remaining historic fabric, and designed and produced the set of architectural drawings used to reconstruct the building. The exhibit specialists (restoration) acted as project supervisors and rounded up the materials and equipment, and provided site coordination. The preservation craftspeople came from the in-house training program and provided the hands-on construction expertise.

Maintenance Helper Students from the Job Corps receive practical experience by repairing the foundation of the White Hall Tavern.

Photos from WPTC collection.

WPTC coordinated the use of preservation and maintenance based employees from throughout the NPS to assist in the reconstruction by using its cross-training program. This program encourages employees from various parks to sign up for a "detail" on a preservation project. The length of the assignment is designed to be sufficient to provide a fulfilling work-centered preservation experience on an actual park project. On this project, masons from the Atlanta-based Southeast preservation crew participated in the dismantling and relaying of the foundation.

Experienced WPTC masons instruct a Job Corps student in the fine art of setting location stakes for a foundation.

Other projects involved employees from local National Capital Area parks. Over a five-year period as many as 10 different career maintenance employees participated in a series of preservation projects at Harpers Ferry NHP. These projects also included full scale preservation and rehabilitation work in several park historic buildings as well as project management skills development. This program expanded the basic agreement to a multiple partnership and provided benefits to all.

Other experiences used for "hands-on" training included construction of replacement wooden doors, sashes, and shutters; repairs to historic brick and masonry foundations and walls; conservation of historic interior plaster and exterior stucco systems; and repairs to historic roofing systems. Throughout this process, Harpers Ferry NHP has become a real-life laboratory for testing and proving all aspects of historic structure preservation!

The partnership program is designed to be flexible and has allowed for the inclusion of students and interns. Architectural students, in cooperative education programs, have participated in large-scale documentation and preservation planning projects. Interns, including foreign students, have worked to inventory historic structures, evaluate their condition, and make recommendations for preservation maintenance. They have worked side-by-side with park employees to develop maintenance-based preservation work-task procedures which will be used to program future maintenance needs.

These projects have served not only to preserve historic resources at Harpers Ferry NHP but have contributed toward the development of servicewide programs and systems. Preservation techniques honed on these projects have proven effective in other parks with similar resources, all the while providing essential training to NPS employees.

Other real benefits have come as a result of this teamwork. Several now standard preservation techniques and training strategies have been developed through these partnership projects. An example is the project-based Record of Treatment.

This document, now recommended by the NPS Guidelines for Cultural Resource Management[1] was born of the need to provide baseline documentation and recordkeeping for every project completed at the park.

The Record of Treatment is significant in the life of a historic structure because it becomes a permanent record of all work done during a certain defined project. While WPTC had been producing a report similar in content for a number of years, it was improved and refined as a result of the partnership projects completed by the WPTC and Harpers Ferry NHP teams working toward common goals. The insistence of the park Chief of Maintenance that an accurate record be kept of all project work was also influential.

All around, this type of "partnering" between Harpers Ferry NHP, other parks, and WPTC has proven to enhance employee skills and morale, and allowed for the completion of much needed preservation maintenance work. How better to provide leadership in the preservation of historic resources than to empower maintenance and preservation employees with the education, training, and confidence necessary to go forth and carry out successful preservation projects.

We hope that WPTC efforts to partner with parks like Harpers Ferry NHP will help to energize the National Park Service to continue its mission to preserve park resources for future generations.

Note

[1] National Park Service Guidelines for Cultural Resource Management (NPS-28) Release No. 4, August 1994, Chapter 8, pg.123.

Tom Vitanza, AIA, is a registered architect and has been affiliated with the WPTC team since completing his three-year training program in 1985. Senior Preservation Architect since 1993, he is responsible for coordinating design activities and has participated in many of the Harpers Ferry projects.

Selected Readings

Barry, Joseph. *The Strange Story of Harpers Ferry.* Harpers Ferry: The Women's Club of Harpers Ferry District, 1979. (Originally published, 1903)

Brown, Stuart. *The Guns of Harpers Ferry.* Berryville: Virginia Book Company, 1968.

Davis, Julia. Shenandoah: *Daughter of the Stars.* Baton Rouge: Louisiana University Press, 1994.

Finkelman, Paul, ed. *His Soul Goes Marching On: Responses to John Brown and the Harpers Ferry Raid.* Charlottesville, VA: University of Virginia Press, 1995.

Frye, Dennis. The Siege of Harpers Ferry. *The Blue and Gray Magazine.* Columbus: Blue & Gray Enterprises, Inc., August-September 1987.

Gilbert, David. *A Walker's Guide to Harpers Ferry.* Harpers Ferry: Harpers Ferry Historical Association, 1995.

Gilbert, David. *Where Industry Failed.* Charleston: Pictorial Histories Publishing Co., 1984.

Lewis, David Levering. *W.E.B. Du Bois: Biography of a Race.* New York: Henry Holt & Co., 1993.

Mongin, Alfred. *A College in Seccesia: The Early Years of Storer College.* Harpers Ferry: National Park Service Publications, 1960.

Murfin, James V. *From the Riot & Tumult: Harpers Ferry National Historical Park.* Harpers Ferry: Harpers Ferry Historical Association, 1989.

National Park Service. *John Brown's Raid.* Washington, D.C.: National Park Service Publications, 1993.

Neiring, William. *Wetlands.* New York: Alfred A. Knopf, 1988.

Oates, Stephen. *To Purge This Land With Blood.* Amherst: University of Massachusetts Press, 1984.

Potter, Stephen R. *Commoners, Tribute, and Chiefs: The Development of Algonquin Culture in the Potomac Valley.* Charlottesville: University Press of Virginia, 1993.

Quarles, Benjamin. *Allies for Freedom: Blacks and John Brown.* New York: Oxford University Press, 1974.

Renehan, Edward J. *The Secret Six: The True Tale of the Men Who Conspired with John Brown.* New York: Crown Publishers, 1995.

Smith, Merritt. *Harpers Ferry Armory and the New Technology.* Ithaca: Cornell University Press, 1977.

Snell, Charles. *Harpers Ferry Becomes a Fortress: September 21, 1862–October 6, 1863.* Harpers Ferry: National Park Service Publications, 1959.

Sullivan, Arthur. *Harpers Ferry in the Civil War.* Harpers Ferry: National Park Service Publications, 1961.

Sullivan, Ken. *The Potomac: A Nation's River.* Hong Kong: Everbest Publishing Co., 1994.

Toogood, Anna Coxe. *The Lockwood House: Birthplace of Storer College.* Washington, D.C.: U.S. Office of Archeology and Historic Preservation, 1969.

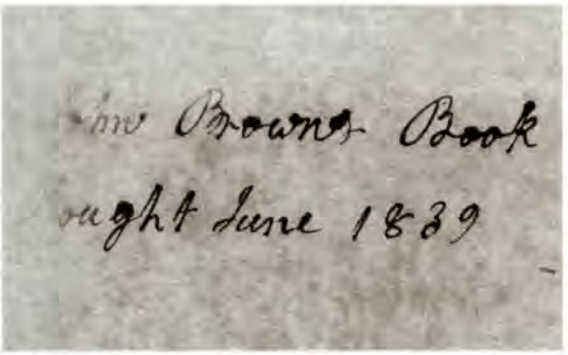
Villard, Oswald Garrison. *John Brown: A Biography.* New York: Houghton Mifflin Company, 1910.

Many of these works are available in public libraries and most of them can also be purchased through the bookstore operated by the Harpers Ferry Historical Association by calling 1-800-821-5206.

Frank Schultz-DePalo

Preserving Artifacts

Displaying John Brown's Bible



A reproduction of this fragile ink inscription is displayed inside the front cover of John Brown's Bible.

In 1994, Harpers Ferry National Historical Park began disassembling its primary museum, the John Brown Story, to make way for a new permanent exhibit dealing with John Brown and his 1859 raid on Harpers Ferry. In planning for only nine months, the new museum and its artifacts would have to meet an equally tight production/installation deadline: the museum opening and its ribbon-cutting ceremony featuring West Virginia Senator Robert W. Byrd and Park Service Director Roger Kennedy would be the centerpiece of the park's Fiftieth Anniversary Celebration on the July 4th weekend of 1994. Complicating the fabrication would be the inclusion of a stellar artifact acquired in 1992, John Brown's family Bible. Protecting the enormous historical, ideological, and monetary value inherent in the Bible would become the cardinal concern of the museum project and the problems inherent in the display of such an item quickly overwhelmed the production schedule, making the Bible case the most conspicuous victim of the project's severe deadline. The Bible was displayed in a conventional exhibit case for the VIP opening, but was then quickly returned to a storage vault in a nearby bank while work continued on its display case. The process by which this case was created encompassed most of the concerns involved in the display of movable cultural property and proves that creativity and logic can carry the day when money and time are in short supply.

Both illustrations show handwritten inscriptions from John Brown's family Bible, which is on display in the John Brown Museum in Harpers Ferry NHP.

Materially, the Bible is not an exceptional artifact. It is a Holy Bible, containing the Old and New Testament, bound in brown sheepskin, about 9 3/4" high by 6 1/2" wide and 2 1/2" thick. Over the course of its life it has been lightly repaired with calfskin and re-backed, and it has acquired marbleized endpapers. What makes this Bible extraordinary are the markings inscribed and scribbled over its pages. "John Browns Book Bought June 1839" is inked on the front flyleaf. Between the Old and New Testaments are four pages reserved for family records of births, deaths, and marriages. These pages are filled with ink and pencil entries and most of the famous members of John Brown's family circle are mentioned. The most poignant entry is the last, a terse record of "Bleeding Kansas" from the abolitionist perspective: "Frederick Brown 2d was Murdered at Osawatomie in Kansas Aug 30th 1856 Aged 26 years." Throughout the Bible appear pencil marks ranging from bold "X"s and complete circling of passages to slight, possibly accidental, jots of the pencil. These inscriptions are personal souvenirs of the Brown family history (virtually the only ones in our park) and some of the delineated passages are compelling evidence for our interpretive assertion that the Brown family's religious beliefs and political philosophy were inseparable.

Books can be difficult objects to preserve. The typical book is a small bundle of assorted organic materials: paper, leather, cardboard, glue, ink, string. Most of these materials absorb water and change size as they do so. This absorption

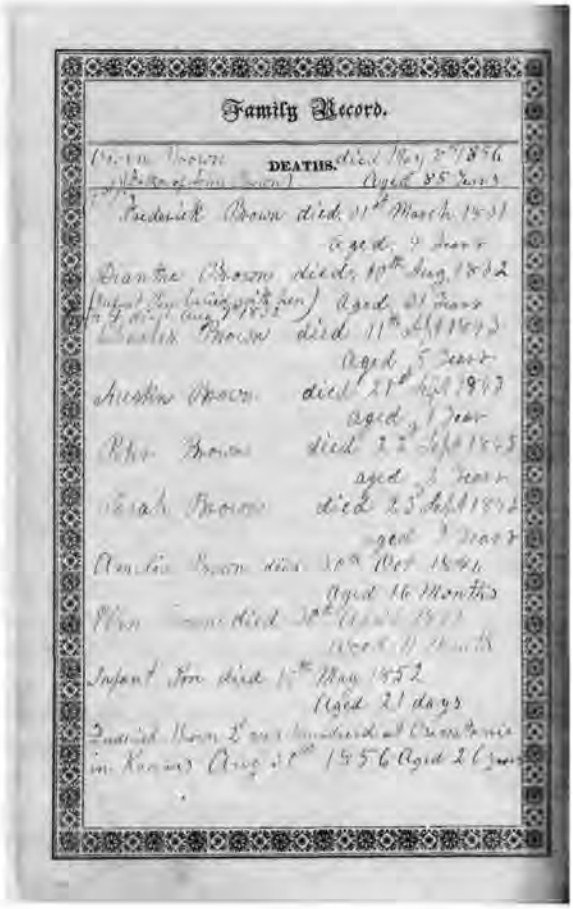
occurs at a different rate for each material, so as the relative humidity in the surrounding air changes, the different materials tend to rub or to pull away from each other. The typical book also constitutes a smorgasbord for the museum pest. Virtually all harmful life-forms, from mold to lice to foraging rats, can find something to eat in a book.

Fragile objects of great significance present museums with a problem. The high cultural and/or monetary value of an artifact usually heightens the pressure to take every feasible step to ensure its preservation, but, paradoxically, this significance also heightens the pressure to keep the artifact on exhibit indefinitely, so that it may be seen by as many people as possible (a pressure that is greater still for a federal museum serving tax-payers). Preparing the Bible for exhibition was an act of juggling these sometimes contradictory demands of exhibition and preservation.

An artifact of this sensitivity needs a state-of-the-art exhibit environment which the reconstructed museum buildings could not provide. Some of the conditions of the building (its vulnerable windows; its limited HVAC system) are among the greatest threats to the Bible's preservation. The challenge to Harpers Ferry Center's Division of Conservation, the National Capital area's Curatorial Services Division, and our own park staff, was to present the production team with parameters for an exhibit case that would be a little world unto itself, a stable micro-environment implanted into the changeable atmosphere of the building. For preservation purposes, the case would have to be dark, but the Bible must still be lit well enough to permit reading. The case atmosphere would have to be sealed, but constantly monitored. Security concerns dictated a case resembling a locked vault to which only a handful could have access, yet must also be easily removable when the inevitable floods arrive. It had to be behind numerous doors (which must not hide the Bible) and have its own sprinkler head (which, if activated, must not get the Bible wet).

Numerous ideas were floated by NPS professionals and contractors, many of them excessively expensive and complicated. Two cases, a "day-time" for viewing and a "night-time" for security, were a component of most of the proposals, but these involved manual or electronic handling of the Bible, a daily risk that negated all benefits. One proposal called for a sealed case mounted on a hydraulic piston that in the event of flood would lower the Bible into a water-tight crypt beneath the basement. It became apparent early on that too many "state-of-the-art" mechanisms were being installed into one small exhibit case and all parties were encouraged to find lower-tech and lower-maintenance solutions. The set-up eventually agreed upon was actually a bundle of ingenious, common-sense solutions to specific logistical problems, rather than the expensive case/machine that was originally envisioned.

The first step involved extending some aspects of the micro-environment beyond the walls of the case itself by "alcoving" the case and making components of the alcove's structure provide some of the safety features. To keep the case from looking like "a-fish-tank-in-a-wall," the alcove was multi-surfaced, the case-glass lowered and slanted, and the Bible displayed low and open, all subtly enhancing the artifact's three-dimensionality. Luckily, the Bible's spine was sound enough to allow for open viewing, and both the front page and page 43 (which bears some interesting pencil markings) can be displayed long-term without endangering the spine. Recessing the case in an alcove made it easier both to isolate the Bible from the light in the room and to provide the case with an independent light source. As the ink inscription on the front endpaper was highly susceptible to light (a conservator would say that the ink is "fugitive") a high-quality copy of the inscription was printed on suitable paper and placed over the original (the press-printed text of the book is quite stable and should hold up well under the current lighting).

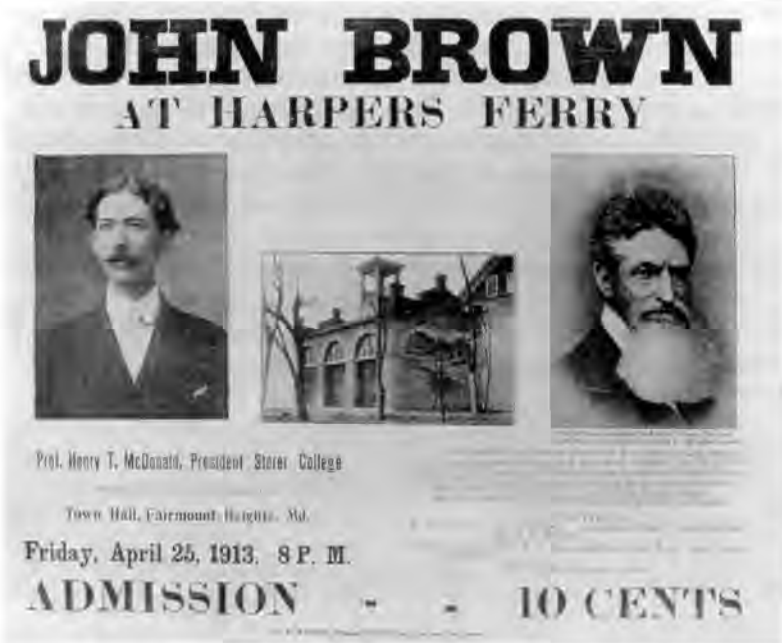

Family Record.

DEATHS.

The last inscription on this list of Brown family deaths calls attention to the shooting of Frederick Brown by pro-slavery forces in Kansas in 1856.

The alcove plays its most important role with regard to physical security, allowing an extension of the security zones around the exhibit case. In case of fire, the alcove also protects the Bible from water damage from firefighters' hoses or its own sprinkler head. Parts of the alcove are made of fire-resistant materials and the graphics-covered exhibit panel to the viewer's left is actually a fire-resistant door that forms the front of a fire-resistant box when closed, which will be kept shut during off-hours.

This fire-resistant, water-shielding capacity of the alcove allowed for a more standardized safety-vault construction for the Bible case itself, with the modifications of such a vault being made for display and environmental control purposes.



John Brown speech poster for speech by Henry I. McDonald delivered at Fairmount Heights, MD, April 25, 1913. Courtesy Harpers Ferry NHP.

Bullet-proof lexan was chosen for the transparent viewing face. The Bible would be lighted using fibre optics, which allowed for a spot of very low intensity (only three foot-candles, comfortably below the recommended five foot-candle maximum). The fibre optic cable necessitated only a small entry portal which would be easy to make airtight around the cable. As the cable is only a passageway for the light, the light bulbs (and the heat they generate) could be stationed outside and away from the case, so that the interior environment need not be penetrated for bulb-changing and fixture maintenance. To keep cumulative light absorption as low as possible, the fibre-optic system is activated by a motion detector that lights the Bible only when visitors are present.

Temperature and humidity inside the case are also monitored remotely. A tiny sensor in the interior is accessed via a small cable threaded through the case wall. Bags of silica gel will be deposited in a tray beneath the Bible. Silica gel is a commonly used humidity-controlling substance which most people encounter when they buy electronic equipment: little bags of the material, in crystalline form, are often packed in with cameras and computers to maintain a stable environment in shipping and shelf boxes. Silica gel is a substance that has a tendency to absorb moisture to a level to which it has been acclimatized. Its capacity to remain and maintain stability is limited, but it is very effective in a contained environment, such as a camera box or a museum exhibit case. The stabilization point, i.e., the relative humidity level that the gel will be acclimatized to and tend to maintain, can be quickly set and manipulated using a microwave oven. Given a relatively stable temperature, it is probable that gel placed in a small sealed environment like the Bible exhibit case will maintain its stabilization properties beyond the currently scheduled six-month gel-changing period. While this "passive" humidity control system should do the trick, the case is fitted with two ports (air entrance and exit) at top and bottom, just in case an "active," mechanical air-handling system should become necessary.

At first glance, it may seem that acquiring a valuable artifact like the John Brown Bible would be nothing but a feather in the cap of a collecting institution, but high-profile exhibit items also place great responsibilities on public museums, parks, galleries, and aquariums and zoos. Such exhibits often bring heightened security risks, rigorous conservation demands, and increased visitation and traffic. Institutions must often strain their budgets and staffs if they accept the challenge to meet these demands and can expect bad publicity and a loss of public trust if they do not. Working with the John Brown Bible has been a bit daunting at times for all concerned, yet being able to work with an artifact of this significance, a book once pored over and prayed over by John Brown, has also been a privilege, and the challenge brought out the best in everyone involved. While the success of today's efforts can only be proved by years of monitoring and testing, the Bible has certainly had the benefit of some of the best museum practices and practitioners that the National Park Service has to offer, all intent on preserving this paper and leather testament to the mind and spirit of John Brown for future generations.

Frank Schultz-DePalo is Park Curator, Harpers Ferry NHP.

David T. Gilbert

The Virtual Visitor Center

Breaking New Ground on the World Wide Web

When the Harpers Ferry Park Virtual Visitor Center was first posted on the World Wide Web—the graphical window into the Internet—we really weren't sure what to expect. We had done a considerable amount of homework during the spring of 1995, and talked to a lot of people. In the process, we learned a few basics about some of the opportunities and obstacles in cyberspace.

First, we knew access to the Web is relatively easy. Anyone with a computer, 14.4 baud or faster modem, Web browser such as Netscape, and an Internet account through a service provider or online service (CompuServe, America Online, The Microsoft Network, or Prodigy) has access to any page, anytime, anywhere on the World Wide Web. With communications giants AT&T and MCI readying their own Internet access services, we understood that the number of regular users—now estimated at between 7–10 million—will continue to grow.

We were particularly interested in the interactivity the Web provides between a home page and its virtual visitor. Users can click on links to view photographs, access specific information, or call up detailed maps. They can conduct search queries through online forms, or they can send email to selected park employees. We found that well-designed pages invite this interaction, giving visitors opportunities to learn and explore—ultimately making for a more memorable visit.

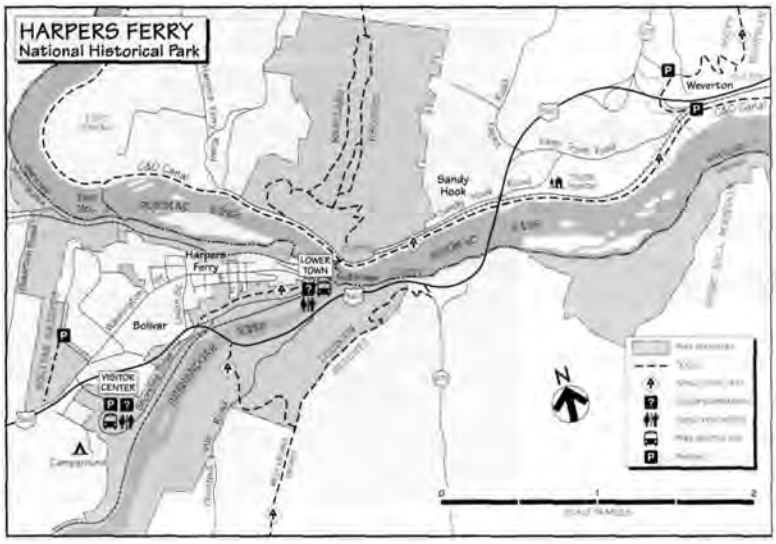
Even more attractive was the Web's capability to make up-to-date information immediately available. A virtual visitor can access late-breaking news about a closed trail, a special park event, or a new cooperating association publication. Web pages can be updated monthly, weekly, daily, or even hourly. Compare this with updating conventional media such as books, newsletters, site bulletins, or even CD-ROMs.

Web pages provide feedback on virtual visitation. Scripts can record the number of "hits," or clicks, on individual pages and images, providing valuable marketing information for park managers. You can learn which topics, images, or maps are attracting the most attention, and use this information to shape the content of your Web site—or even of an actual park program.

We were also warned about some of the Web's drawbacks. The explosion of "net surfers" in just the past six months has taxed the Internet's communications infrastructure. The bandwidth that carries all this electronic traffic from server to user can slow to a painstaking crawl during peak business hours. Cooperating associations trying to sell park publications are also faced with obstacles to online commerce—it's just too easy for hackers to intercept credit card numbers and other valuable customer information. Until security tools are improved and, more importantly, until customers are comfortable with online commerce, conducting business on the Web is a difficult proposition.

Finally, we learned a great deal about just how much it might cost parks to develop online material and "serve" it on the Web. The Harpers Ferry Park Virtual Visitor Center was created through a partnership which tapped the programming expertise of a park volunteer, the graphic design expertise of the Harpers Ferry Historical Association (the park's cooperating association), and the educational, cultural, and administrative resources of the National Park Service. The only itemized expense was $19.95 for the HTML Manual of Style, by Larry Aronson (HTML—Hypertext Markup Language—is the *lingua franca* of the Web). The Harpers Ferry Park Virtual Visitor Center is hosted by the National Park Service on their server in Denver at no direct cost to the park.

Other parks and associations we talked to have also found partners to help develop and host their Web content. Grand Canyon National Park has collaborated with the Grand Canyon Association and Northern Arizona University; Jefferson National Expansion Memorial is working



with Washington University of St. Louis; and Golden Gate National Recreation Area has partnered with Golden Gate National Park Association and community volunteers from the San Francisco Bay area.

So how has Harpers Ferry NHP fared in cyberspace? A few examples illustrate the dynamic impact the Web has had for us. A few days after our Virtual Visitor Center was posted on July 27, 1995, a ranger met a couple in the park from Washington, DC. They had in their hands a printout of our Virtual Visitor Center park map, Lower Town Trail Guide, and listing of local accommodations—all of which they had downloaded from the Internet. It turns out they had "surfed" to our Web site the previous evening, decided then and there to visit the park, then called one of the Bed & Breakfasts we list to make a reservation for the weekend. They came to the park both informed and enthused.

In the aftermath of the disastrous flood of January 20-21, 1996, the park was able to quickly post pictures and reports detailing the impact and extent of flooding in the Lower Town Historic District. Meteorologists with the NBC-TV affiliate in Washington, DC, directed viewers to our Virtual Visitor Center, generating more than 1,400 online visits in just seven days. Since the park was closed during this period, these numbers represent important visits by people who otherwise lacked direct access to park information, resources, and interpretive programs. And since email traffic to the park's public relations specialist indicated nationwide interest in the flood story, park managers decided to formally track daily "virtual visits" to the Harpers Ferry Park Virtual Visitor Center—the first national park in the country to do so.

A high school student visiting the park with her family just two weeks after the flood was drawn here as a direct consequence of our flood reports on the World Wide Web. She had decided to do a classroom project on the Flood of 1996, and was visiting the park to see first-hand the flood's devastating impact. She lived just 30 miles away, and had never previously visited Harpers Ferry National Historical Park.

Our Virtual Visitor Center has generated email inquiries from senior citizens, elementary school teachers, college students, and Civil War scholars. Indeed, all of the Web's advertised benefits—widespread availability, inter-activity, and immediacy—have proven their worth. With a reasonable amount of skill, a modest financial commitment, and a certain degree of imagination, you can treat virtual visitors to an informative, entertaining, and memorable tour of your park. If they choose to actually visit your park, they will come better prepared and better educated. If they live in a distant place, then you've reached an audience you might have otherwise missed.

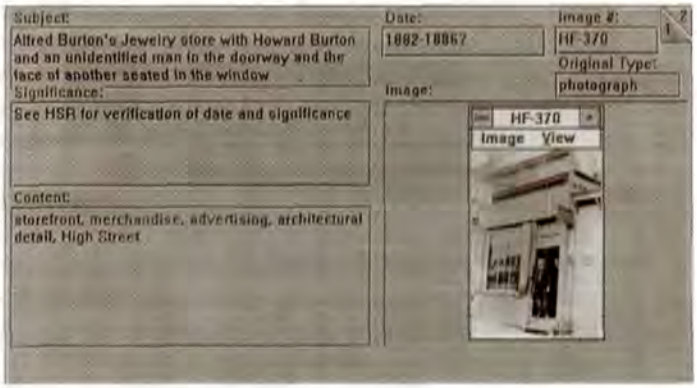
Dave Gilbert is Publications Manager of the Harpers Ferry Historical Association. He welcomes your comments and questions via email (at dgilbert@intrepid.net).

National Park Home Pages Worth a Visit

National Park Service Home Page
http://www.nps.gov
Cooperating Associations Home Page
http://www.nps.gov/coop/coophome.htm
Capital Reef National Park Home Page
http://www.nps.gov/care/care.htm
Chesapeake & Ohio Canal NHP Home Page
http://www.nps.gov/choh
Fredericksburg & Spotsylvania NMP Home Page
http://www.nps.gov/frsp
Golden Gate NRA (Alcatraz Island)
http://www.nps.gov/alcatraz/index.html
Grand Canyon National Park Home Page
http://star.ucc.nau.edu:80/~grandcanyon/
Harpers Ferry NHP Virtual Visitor Center
http://www.nps.gov/hafe/hf_visit.htm
Jefferson National Expansion Memorial Home Page
http://www.st-louis.mo.us/st-louis/arch/
Mammoth Cave National Park Home Page
http://www.nps.gov/maca
Mesa Verde National Park Home Page
http://mesaverde.org
Monocacy National Battlefield Home Page
http://www.nps.gov/mono
New River Gorge National River Home Page
http://www.nps.gov/neri

Patricia Chickering

Harpers Ferry's History Database



A data screen from the park's photolog system, a computerized inventory of 2,000 historical photographs.

The cultural and natural resources of Harpers Ferry National Historical Park attract hundreds of thousands of visitors each year. Excursionists, hikers, sight-seers, history buffs, and naturalists tour preserved and restored buildings, and enjoy unparalleled scenic beauty. They absorb the town's historic lore—everything from stories of the United States Armory and John Brown's Raid to accounts of floods which often (and as recently as this past January) devastated the town. Wetland flora and fauna, timbered hillsides, and nearby canal walks provide intimate glimpses of an abundant natural heritage. Beyond the park's boundaries, shops, restaurants, hotels, and recreation facilities cater to visitors.

Burton's Jewelry Store. Howard Burton, son of proprietor Alfred Burton, in doorway; 1882–1889 photo courtesy Harpers Ferry NHP.

A diverse population thus benefits from the park's attractions. The park has, therefore, long recognized an obligation to assure the integrity and accuracy of its interpretive and historic preservation programs.

To meet that obligation, in 1989 the park began developing a treasure less visible than its cultural and natural resources: its innovative History Database. Established to support park preservation and development programs, the database evolved to serve a variety of users—ranging from park staff to ancestor-hunters—with authors, historians, and event planners included.

Until the late 1980s, the park's interpretive time-frame ranged between the 1859 John Brown Raid and the Civil War. During the early park development period in the 1950s, historical research for the park had, therefore, not extended beyond the Civil War. But the park's 1987 Resource Management Plan, which recognized the need to expand the time-frame into the 20th century, mandated a new research effort.

Historians in the 1950s compiled a card index to a huge body of local primary resource material covering the interpretive period. They examined over 30,000 pages of historical documents and catalogued nearly 600 historical maps, photographs, and prints. That resource remained in 1988, when research to support the new and broader interpretive time-span became necessary. Park professionals recognized an opportunity to apply modern computer capability to untapped resources and to the earlier data, and the result is the History Database, a user-friendly index to a massive body of information.

In 1988, the project to create a computerized history database was approved, with work to begin in January 1989. Because the park lacked the needed professional staff, research historian positions were filled under a Cooperative Agreement between the National Park Service and the University of Maryland History Department.

The first order of business was to design the database to incorporate a three-part index to courthouse records, censuses, and local newspapers. The research historians located a combination of computer software programs which suited the project's needs, and developed data entry styles. Census and Court records were entered in DBase, and newspaper data was entered in WordPerfect. WordCruncher software, developed by Brigham Young University and currently marketed by Johnston & Company of Bloomington, IN, was used to index the data.

Researchers visited the Jefferson County courthouse in Charles Town and created deed chains for property within park boundaries, then entered each record in the database. All available local census information was likewise entered. But by far the largest task involved reading and extracting locally-relevant data from 19th- and early-20th-century newspapers, summarizing the

information, and entering it in the database. Newspaper reading initially focussed on the Spirit of Jefferson of Charles Town, but when bound volumes of the post-Civil War *Virginia Free Press* were found in the Jefferson County Courthouse, they too were read and entered, as well as pre-Civil War issues of that same paper which had been examined in the 1950s. When it became obvious the integrity of the newspaper database rested on its being as comprehensive as possible, a third publication, *The Farmers Advocate* was read and entered.

There were gaps in newspaper collections, however. To fill those, and to supplement the census record (the National 1890 census was lost to fire), historians began searching archival collections at various repositories. They looked for missing issues of newspapers, for 1890s population data, and in short for any relevant local information. The database absorbed it all.

Research and technology reveal the past, inform the present, and enlighten the future.

Because WordCruncher indexes each unique word or character, researchers can search by word or combination of words, by date, or by other alphabetical or numerical entities. The user-friendly software presents information in capsule form and identifies the resource's location. Researchers can assemble and print data files in minutes, and then access the primary resource material. Harpers Ferry National Historical Park thus has in its History Database a unique research tool, accessible to park interpreters and archeologists, to researchers who visit the park library, and to staff at the Interpretive Design Center at Harpers Ferry Center.

The database went to work for the park almost from its inception. In 1989, while in its infancy, it supported the first draft History Section for the Historic Structure Report (HSR) for Park Development Package 116 and for the archeological investigations of the Package 116 site conducted that summer. The database pinpointed previous improvements made to Package 116 buildings. It also contributed to the building's socio-economic history by identifying occupants and type of use.

Concurrently with work on Package 116, Harpers Ferry Center designers of the Frankel Brothers Clothing Store exhibit and the reconstructed Burton Jewelry Store (both opened in 1991) made extensive use of the database. The database also supported Interpretive Design Center staff in developing a streetscape study and interior plans for Package 116 and Park Buildings 5, 7, and 16.

In the summer of 1993, the History Database spawned another innovation—the Photolog Project. Begun as a program to index captions to the park's historical photograph collection as part of the History Database, the project evolved into an image retrieval system, with scanned images linked to text. The text-to-image link permits electronic access to the photographs much as the History Database facilitates access to primary resources. The Photolog project has proven tremendously helpful in expediting access to the park's collection of over 2,000 historical photographs.

As word of the History Database spread, historians began receiving research requests from both inside and outside the park. Inquiries ranged from a request for details of Civil War pontoon bridges over the Potomac River to a question about an advertising sign on the Maryland Heights cliff face. Visitors who searched the database for ancestors usually found them, and, by sharing clues they brought, those visitors invariably contributed new information on local property and residents.

Early in the project, an analogy developed in the mind of this historian: working with the database was like creating a paint-by-number scene. Myriad bits of information emerged from the database and created a local picture—almost without effort, and in remarkably accurate context.

While the database has contributed immeasurably to knowledge and understanding of all aspects of Harpers Ferry, much remains to be done. Resources exist within the park which could augment the database, thus contributing to a more comprehensive view of over two centuries of history. Many data sources have been identified but not yet investigated or documented. For example, financial accounts of the U. S. Armory and Arsenal for the first half of the 19th century—data available on microfilm in the park—would greatly enhance future studies of the Armory (which would be mandated should the Armory property be added to the park).

In the meantime, however, the database remains a priceless resource—a monument to the vision that inspired it and to the scholarship and dedication of its creators. It is a legacy to all who work in Harpers Ferry Park, and to those who come to experience the park's many attractions.

Patricia Chickering is a former contract historian who worked in Harpers Ferry NHP under a cooperative agreement between the NPS and the University of Maryland.

Paul A. Shackel

Transforming Craft to Wage Labor

Archeology of a Worker's Houselot

Archeology has been performed in Harpers Ferry National Historical Park since 1959. The earliest excavations served to answer questions related to contemporary preservation needs, such as reconstructing the town's 1860s landscape. Over the past decade more inclusive histories of the park have developed and the park's research archeology program has taken advantage of this new paradigm. Archeologists are asking questions that go beyond particularistic landscape and architectural reconstructions. While several of these issues have been addressed in a previous *CRM* publication (Shackel 1994:16–19) I will explore here the changing relationship of work and domestic life during Harpers Ferry's early industrial era.

Fig. 1. Excavation plan of the Armory Workers' House in Harpers Ferry National Historical Park. Drawing by John Ravenhorst.

Arms production at the Harpers Ferry Armory began with craftsmen who were knowledgeable in the production of the whole gun. The transformation from craft production to wage laborers in a production line creating interchangeable parts came with great difficulty at the armory and it was not fully implemented until the 1840s. While it appears that some armorers accepted their fate in return for wages, others felt their livelihood was at stake, especially when their wages decreased with the introduction of new machinery. However, the de-skilling of craftsman was not immediately transformed into a wage earner at Harpers Ferry. Rather, an intermediate form of production was created—piecework. The pieceworker comprised a significant proportion of the armory's labor force in the 1820s and 1830s. The armorer was no longer considered a true craftsman, since he specialized in the production of only one part. The pieceworker, however, had some control over his production. He was able to dictate his work hours as well as his rate of production. His presence represented the last vestiges of the freedoms that were synonymous with craft production (Smith 1977). With the establishment of piecework, armorers lost their skill and they became interchangeable within the larger manufacturing process. Historically, it has always been assumed that piecework occurred solely within the armory grounds. Workers were allowed the freedom to come and go as they pleased as long as they met monthly quotas and all parts of the arms manufacturing process occurred within the factories. Therefore, we assume that a true separation of work and domestic life had occurred with the piecework system. However, excavation of an armory workers' assemblage, dating to the era that piecework predominated, the 1820s and 1830s, indicates the possibility that armorers took greater liberties in the location of their work, and domestic manufacturing was still part of the production process.

The domestic lot associated with armory workers and their households was excavated by National Park Service archeologists (Shackel 1994). The house was originally constructed in the

Fig. 2. A Lock from a U.S. Flintlock Musket Model 1816.

Figures 2–4, photos by Cari Young Ravenhorst.

Fig. 3 Armory workers' tools including flat files, half-round files, triangular files, and a wood chisel.

1820s along with a bake oven, smokehouse, privy, and stable (figure 1). While it is uncertain whether its original owner actually inhabited the building, armory workers and their families probably occupied the building for most of the first half of the 19th century. While armory records from 1841 to 1852 indicate the specific households that rented the structure, armory records dating before and after this era have been destroyed, thus making identifications of specific families in the structure difficult (Bumgardner 1991). Since a significant proportion of armory workers were piece-rate workers in the 1820s and 1830s, and the dwelling was relatively small, there is a good probability that pieceworkers inhabited the structure rather than supervisors. Even though the archeological evidence consists of one house lot, it does provide an example of changing relations between work and domestic life at the armory.

Fig. 4. Combination tool.

Three goals directed the excavation strategy at the armory workers' house: (1) to aid architectural historians; (2) to provide a diachronic analysis of the changing physical and cultural landscape; and (3) to contribute to the interpretation of 19th-century domestic life among armory workers in Harpers Ferry. Therefore, excavation units were placed randomly throughout the backyard as well as adjacent to architectural features.

Archeological evidence from the armory workers' house supplies some indication of home production of arms in the form of piecework. The earliest archeological context at the house dates from the 1820s until 1841. Archeologists discovered part of a .52 or .54 caliber gun barrel, a gunlock of which the lock plate measures nearly 6", a side screw for securing the lock to the stock, and a large wood screw for attaching the butt plate to a gun stock. These items, identified by Edward Ezell, former curator at the Smithsonian Institution, were probably from a U.S. Rifle Model 1816 (also see Brown 1968:65) (figure 2). Also found is a middle barrel band, a nearly complete socket bayonet from a U.S. Flintlock Musket Model 1816 (Reilly 1970:2–3), and two ramrods (Larsen 1994b:6.6).

Tools found in this context related to armory production include a wood chisel, probably for the modification or construction of stocks. Three different types of files—flat, half round, and triangular—relate to metalworking (figure 3). Also identified was a combination tool (figure 4). Combination tools varied in form and shape, depending upon the model that they serviced. Huntington (1972:251–255) describes the constant modifications made to the combination tool during the 1830s. This combination tool probably serviced a pre-1842 model gun.

The tools and arms parts identified in association with the various craft-made arms parts (all muskets prior to the 1840s) provide an interesting scenario. The assemblage dates to the era of craft and piecework manufacturing prior to the imposition of manufacturing discipline. The armory workers who occupied the structure prior to the 1840s apparently worked with the manufacturing of weapons at their domicile. The tools probably came from the armory, and the discarded gun parts were produced by the armorer to supplement his family's income, or they may have been part of the armory's piecework production. In either case, the gun parts are all from guns that were primarily produced in the U.S. Armory during the era predominated by piecework. Currently, no documentation exists that states that some types of piecework were performed by armorers at their house. The presence of gun parts and wood and metal filing tools at an armorer's dwelling challenges this assumption. Pre-factory discipline at the U.S. Armory may have encouraged, or at least it did not discourage, armory workers from laboring in their homes.

When the military assumed control over arms production at the armories in 1842, two types of labor existed in the factory—day-workers and pieceworkers. The inconsistency of time for the different occupations to complete tasks and meet quotas was noticeable into the 1840s. In 1842, Master Armorer Benjamin Moor noted that

some of the armory employees "work as much as 10, some as much as 11, some not more than 8, and some not more than 6; the Barrel welders, between 8 and 9 hours" (Inspection of Harpers Ferry Armory, R.G. 156 Ordnance Office no. 28, c75, 25 February 1842).

The Harpers Ferry Armory Superintendent ordered that all armorers must work a standard amount of time within the confines of the factory. In response, the pieceworkers and many of the day hands went on strike. They assembled in the Arsenal Yard where speeches were made denouncing the military system. They discussed the recently-enforced regulations that required all workmen to conform to a new time discipline reinforced by the striking of the bell that signaled the start and the end of work (Letter, Craig to Talcott, 21 March 1842, HFNHP 12(10):942–44). While striking for over one week, no disorder or violence occurred, although citizens rallied in public gatherings in support of the armorers (Letter, Craig to Talcott, 22 March 1842, HFNHP 12(10):946; VFP 31 March: 1842:2). An unsigned letter to President Tyler from the armorers protested the actions taken under the military system. It stated that "the armorers of the Harpers Ferry Armory, feeling that their rights as Freemen have been wrested from them ..." (Letter, Anonymous to President John Tyler, 28, March 1842, HFNHP 23(2):136–147).

A large number of armorers chartered a Chesapeake and Ohio canal boat and proceeded to bring their grievance to President Tyler. The president courteously greeted the armorers and shook hands with each of the men. Tyler told the armorers that he greatly appreciated their work, considering "the workmen as the bone and sinew of the land and its main dependence in war and in peace ...." but "they must go home and hammer out their own salvation" (Barry 1988:31–32). Tyler also promised that their grievances over the military system would be addressed. Upon their return to Harpers Ferry, amnesty was granted by the Secretary of War, and workers returned to their jobs on April 1 (Letter, Craig to Talcott, 22 March 1842, HFNHP 12(10):946–48; VFP 7 April 1842:2). The House of Representatives created a committee to investigate the armorers' protest and they ruled in favor of the military system (VFP 1 December 1842:2). Both houses of Congress adopted a bill providing for a military superintendency (VFP 25 August 1842:2).

Rules and Regulations for the workshops were reprinted and posted in the armory workshops. For instance, rule five stated "All persons employed at this Armory, will at the signal for work, repair to their appropriate Stations, and then perform their duties diligently and in an orderly manner" (Rules and Regulations for the Workshops US Armory, 16 October 1842, HFNHP 24(10):920–21). This rule implies that all workers were to be accounted for and, therefore, they must labor within the factory at their assigned work station. Standardized hours of production became synonymous with the military superintendency.

The archeological context from the armory workers' dwelling provides data that reflects changes between the relationship of production and domestic life. With the formality of the work place and the imposition of time discipline and accountability of laborers, tools, and products, the armory worker increasingly lost control over a portion of his life. The change to this new manufacturing discipline and its affects on the daily activities of armory workers is noticeable at the household level.

An archeological context that dates from 1841 through 1852, from an armory worker's house described above, contributes some clues as to the effects of the new work discipline on domestic relations. The historical record indicates that in the early 1840s, at least, an assistant jobbing smith, who may have done some piecework, lived in the structure. By the late 1840s, a mechanic and his family occupied the structure (Bumgardner 1991). The mechanic needed to be bound to the rhythm of industry and was an essential component of the industry's mechanization and operations. Therefore, he did not operate under the piecework system, and he could not spend any of his work time anywhere else except at the factory.

The archeological record indicates a substantial decrease in the amount of arms parts found in the domestic assemblage at the armory workers' house. One arms part, a mainspring from a gunlock, and only a few files were found (see Larsen 1994b:6.5).

The sharp decrease in arms and tools in the domestic assemblage of an armory workers' dwelling is indicative of the changes found in the armory as a whole. The new military system greatly impacted the worker as well as his household's domestic relations. The new work reforms eradicated any vestiges of craft production remaining in the armory. Many of the armory workshops were stripped of their outdated machinery starting in 1838, and they were replaced with new machinery that created interchangeable parts for the mass production of guns (Smith 1977:284). Every part and every person became accountable in the production of firearms and hours of operation were established (Smith 1977:271).

Only one arms part and a few tools were found in the armory workers' domiciles post-1841 assemblage. This pattern is probably reflective of the increasing control that the military superinten-

dency had on the production process. A clearer division was made between the work process and domestic life. Any means that an armory worker had to supplement his income through greater production in the piecework process was taken away. Workers' production was confined to the factory for ten-hours, a work day longer than they were accustomed.

Historians have made significant contributions to the changing physical history of Harpers Ferry (see Snell 1981a, 1981b), and to the development of new technology and social unrest (Smith 1977). They have, however, paid little attention to the social and domestic relations of armory workers' domestic life in an armory town. This archeological investigation of an urban house lot provides a picture of the transformation of domestic relations in an industrializing town. The change from craft to piecework to wage labor truly affected domestic life of armory workers' households as well as their relationship with the rest of the community.

References

Barry, Joseph

1988 *The Strange Story of Harpers Ferry With Legends of the Surrounding Country.* Reprint of 1903 edition. Shepherdstown Register, Inc., Shepherdstown, West Virginia.

Bumgardner, Stan

1991 Historic Structures Report, Building 48, Harpers Ferry National Historical Park, Harpers Ferry, West Virginia. National Park Service/University of Maryland Cooperative Agreement Historic Research Project. On file, Harpers Ferry National Historical Park, Harpers Ferry, West Virginia.

Huntington, R.T.

1972 *Hall's Breechloaders: John H. Hall's Invention and Development of a Breechloading Rifle with Precision-made Interchangeable Parts, and Its Introduction into the United States Service.* George Shumay, York, Pennsylvania.

Larsen, Eric

1994 Worker's Privilege: Metal Items from Park Building 48. In *Domestic Responses to Nineteenth-Century Industrialization: An Archeology of Park Building 48, Harpers Ferry National Historical Park, Occasional Report No. 12,* edited by Paul A. Shackel, pp. 6.1–6.12. U.S. Department of the Interior. National Park Service, Washington, D.C.

Reilly, Robert M.

1970 *United States Military Small Arms: 1816–1865.* The Eagle Press, Baton Rouge, Louisiana.

Shackel, Paul A.

1994 Archeology of an Industrial Town: Harpers Ferry and the New Order of Manufacturing, *CRM* 17(1):16–19.

1994 *Domestic Responses to Nineteenth-Century Industry: An Archeology of Park Building 48, Harpers Ferry National Historical Park, Occasional Report No. 12.* Department of the Interior, National Capital Region Archeology Program. National Park Service.

Smith, Merritt Roe

1977 *Harpers Ferry Armory and the New Technology: The Challenge of Change.* Cornell University Press, Ithaca, New York.

Snell, Charles W.

1981a A Comprehensive History of the Armory Dwellings, Houses of the U. S Armory at Harpers Ferry, Virginia, 1789–1884. *Volume I. A History of the Construction, Repair, Improvements, and Acquisition of Armory Dwelling Houses 1789–1841.* On file, Harpers Ferry National Historical Park, Harpers Ferry, West Virginia.

1981b A Descriptive Catalog and Directory of 187 Armory Dwelling Houses, 1841–1852 of the U. S. Armory at Harpers Ferry, Virginia. Including Rents Collected. Volume II. *A History of Armory Houses.* On file, Harpers Ferry National Historical Park, Harpers Ferry, West Virginia.

Virginia Free Press [VFP] Charles Town, Virginia/West Virginia. Newspaper on microfilm, Harpers Ferry National Historical Park, Harpers Ferry, West Virginia.

31 March: 1842:2

7 April 1842:2

25 August 1842:2

1 December 1842:2

Letters. On microfilm, Harpers Ferry National Historical Park, Harpers Ferry, West Virginia.

Rules and regulations for the Workshops US Armory, 16 October 1842, HFNHP 24(10):920–21

Letter, Craig to Talcott, 22 March 1842, HFNHP 12(10):946-48

Letter, Anonymous to President John Tyler, 28, March 1842, HFNHP 23(2):136–147

Letter, Craig to Talcott, 22 March 1842, HFNHP 12(10):946

Letter, Craig to Talcott, 21 March 1842, HFNHP 12(10):942–44

Photostat. On file, Harpers Ferry National Historical Park, Harpers Ferry, West Virginia.

Inspection of Harpers Ferry Armory, R.G. 156 Ordnance Office no. 28, c75, 25 February 1842

Paul Shackel is Chief Archeologist, Harpers Ferry National Historical Park.

Susan M. Pierce

SHPO Partnership with Harpers Ferry

As the crow flies, the West Virginia State Historic Preservation Office seems within easy reach of its National Park Service partner, the Harpers Ferry National Historical Park. However, the mountains of West Virginia make any field trip to the eastern panhandle where the park is located seem like a trip to Oz. By car, the trip to Harpers Ferry from our office in Charleston is almost a six-hour sojourn and one must travel through Virginia or Maryland to reach this corner of the state. At the end of the journey one descends into the hollow between the triangle of mountains at the confluence of the Shenandoah and Potomac rivers. Nestled in the hills is Lower Town, the core of the park.

The principal themes of interpretation at Harpers Ferry focus on the cultural resources which are located primarily within Lower Town and Virginius Island and extant from the Civil War occupation by both Confederate and Union troops and John Brown's raid on the arsenal. Surrounding the park are farms and small towns that represent the antebellum history of the state. Once a rural, agriculturally-based area, Jefferson County is now one of the fastest developing counties in the state due to its close proximity to the greater Washington, DC area. Not only does our office work with the park to review activities that affect the cultural resources within its confines, but in partnership with the park staff have confronted issues that affect it from outside its perimeter.

This dual role has developed a team spirit; at Harpers Ferry one is greeted by a friendly "hello." Although for the last eight years I have met "across the table" from the park representing the SHPO in the Section 106 review process, I feel that my colleagues at the park are allies in the preservation of the history of this corner of the state regardless of whether it is meeting during a formal Section 106 review, sharing technical information and advice, or addressing county preservation issues.

Ironically, the State of West Virginia once owned portions of the Lower Town. In the early 1950s, the state began purchasing land in Harpers Ferry following the authorization of the Harpers Ferry National Monument by Congress in 1944. By December 1953, the National Park Service completed acquisition from the state, and the park was readied for public use. The habit of cooperation was set in place from the beginning of the park.

One of the first Section 106 case projects assigned to me at the SHPO was the reconstruction of "Building 14," the Alfred Burton Jewelry Shop, located on the lower portion of High Street. From 1858 to 1861 and after the Civil War, it carried "...a full assortment of Watches and Jewelry, Repairing was also done." In 1956, the building was dismantled and placed in storage until the end of 1989. When funding became available, the park considered its return to the streetscape of High Street important to finish the story of 19th-century commercial activity in town. Its return to the street from the warehouse became an official review and was submitted to our office by the National Capital Regional Office. Its restoration on the original site was considered to have "no adverse effect" on the historic characteristics of the building or the park. The building is now an exhibit displaying scales and a variety of original equipment and wares from the shop returned to the park.

Subsequent to that project, our office became involved in public hearings regarding proposed water lines associated with a townhouse development immediately outside the park boundary. Although the park is protected by a legal boundary, the encroaching development surrounding it in Jefferson County affects its setting and context. Testifying in front of an administrative judge for the West Virginia Public Service Commission, I explained the newly-passed state review process for undertakings that were funded, permitted, or licensed by the state. Defending newly-written legislative rules to a disbelieving applicant was a challenge. It was new to me, too. As a result, the hearing proved successful as an opportunity to test the state law as a way to protect the fringes of the park near Schoolhouse Ridge. Ultimately, the developer's property was purchased by the Civil War Trust and the townhouses were not built.

Later, the replacement of the c.1949 US Route 340 Harpers Ferry Bridge outside the park was identified as having a substantial visual impact on the park. This two-lane bridge which crosses the Shenandoah River east of Virginius Island had deteriorated and required repair or replacement. Early planning discussions were initiated among all parties of the Section 106 review process. Consultation occurred among our office, the park, the West Virginia Division of Highways, the Federal Highway Administration, and the

Advisory Council on Historic Preservation to develop a Memorandum of Understanding.

This agreement established guidelines for the development and construction of the project that were later incorporated into the Section 106 review process. The key stipulations of the agreement confirmed that the Division of Highways would limit the bridge to a two-lane structure whether repaired or replaced. Later in the review process the bridge design alternatives addressed the potential impacts by the road cut to the viewsheds from the park. Also evaluated were impacts to additional mid-19th-century structures in Bolivar outside the park boundary. A Phase I archeological survey was conducted; no sub surface sites were identified. The review of the project identified eligible standing structures in Bolivar, but determined that there was no effect to cultural resources.

The SHPO and the park have also provided peer assistance to each other on a variety of other joint projects. During the last few years, the state has developed a fall Archaeology Week. This event has included educational activities throughout the state promoting awareness of archeology. Harpers Ferry NHP has been a venue for talks and site visits for the public publicizing the archeological surveys conducted within the park. For example, in October 1993, the park's Archeology Division conducted a "behind the scenes" tour of the Lower Town, Virginius Island, and laboratory facilities. Public comments after the tour were enthusiastic over the opportunity to meet with the archeologists, see the historic sites on Virginius Island, and examine the artifacts retrieved for curation in the labs.

This past January, our staff also met with park staff to evaluate flood damage. The heavy snows and thaws of the 1996 winter caused the Shenandoah and Potomac rivers to reach flood levels, threatening the low lying areas of Harpers Ferry. Already scheduled to visit the eastern panhandle to evaluate a highway project, we notified the park that SHPO staff would be in the area and could come to the park. We were welcomed and shown the emptied exhibit buildings of Lower Town which had been evacuated in the middle of the night before the water crested. Maintenance staff was still hosing out mud that had entered with the flood waters. We donned boots provided by the park staff and trudged out to Virginius Island to examine blow-outs that had occurred to the historic mill foundations. The efforts of park staff to protect the exhibits were impressive; we were only able to provide moral support, the park had already averted the worst of the damage.

Our office also provided letters of concern to the Jefferson County Planning Commission during a recent development project that destroyed Civil War earthworks outside park boundaries. These earthworks were constructed by General Phil Sheridan's troops for the defense of Harpers Ferry in 1863. Our office could only provide unsolicited expert advice to the county; this was clearly a local matter without federal or state involvement. We interfered as unabrasively as possible. However, neither our office nor the park could prevent their destruction.

Because of the distance to the eastern panhandle, our office sometimes relies on local contacts to keep up-to-date with local activities. Recently, the local planning commission evaluated the feasibility of an addition to the Jefferson County Courthouse located in nearby Charles Town. The courthouse is the site where John Brown's trial took place following his capture in Harpers Ferry. As a result, the park staff has great interest in the historic character of the courthouse and kept us informed about the proposed addition even though we were unable to attend a public hearing on the matter. At the moment, lack of funds has led to the indefinite postponement of the courthouse addition.

Charles Town and Shepherdstown, both near Harpers Ferry, now participate in the Certified Local Government program. (The Town of Harpers Ferry is currently not involved.) It is possible that these communities, the county, our office, and the park could create a peer assistance network to provide training and support regarding preservation issues. For it is clear that the development of Jefferson County will continue around the park and will affect the cultural landscape of the county. In the next few years, our two offices should evaluate the possibilities of working with the community to identify and protect its cultural resources. This ultimately will serve both the cultural resources of Harpers Ferry NHP and its neighbors.

Susan M. Pierce is Deputy State Historic Preservation Officer for Resource Protection, West Virginia SHPO.

Barbara J. Howe

CRM at Harpers Ferry National Historical Park

A Concluding Perspective

Harpers Ferry, West Virginia, is best known as the site of John Brown's October 1859 raid, which helped propel a dividing nation into Civil War in April 1861. Future Confederate leaders Col. Robert E. Lee and Capt. J.E.B. Stuart came to Harpers Ferry when their loyalties were to the United States Army. During the war, both Union and Confederate armies fought for control of Harpers Ferry because they needed the products of its industries and control of the Baltimore and Ohio Railroad (B&O). Harpers Ferry has far more significance, though, and that is the challenge for the National Park Service (NPS) at Harpers Ferry National Historical Park (Harpers Ferry NHP). Historians of technology know that Brown chose Harpers Ferry because its federal arsenal might provide weapons for his crusade against slavery. Their interests focus on the production of those weapons and the town's water-powered industries. Industrial archeologists love the ruins of those industries and know Harpers Ferry as a place where the B&O, America's first trunk line, and the Chesapeake & Ohio (C&O) Canal Company competed for access to the narrow strip of land along the Potomac in Maryland in their quest to link the trans-Allegheny west to the eastern seaboard. The B&O also crossed the river here on a rare Bollman truss bridge which was blown up during the Civil War and later rebuilt, only to be destroyed in the 1936 flood.

Preservationists trace the history of the peripatetic brick engine house where the U.S. Army captured John Brown, a building that went to the 1893 World's Columbian Exposition in Chicago and has sat in several locations in the Harpers Ferry area. They also see Harpers Ferry NHP as a laboratory for the evolving philosophies of preserving, restoring, or reconstructing 19th-century buildings discussed in the article by park architect Peter Dessauer.

For African Americans, Harpers Ferry holds special meaning. In 1867, the Freedmen's Bureau established Storer College, a predominantly African-American institution that closed in 1955 as West Virginia integrated its colleges and universities after the 1954 Brown vs. Board of Education decision. Frederick Douglass and W.E.B. Du Bois visited Harpers Ferry and the Niagara Movement met there in 1906. A few years later, the Niagara Movement would give rise to the NAACP. As a side bar in the John Brown saga, Du Bois returned to Harpers Ferry in 1932 to oppose the Heyward Shepherd Monument erected the previous year by the United Daughters of the Confederacy. Shepherd was a free black man and the first casualty of Brown's raid. Interest in the park's 1995 stance to display the history surrounding Shepherd's death in its entirety, including the monument and Du Bois' reaction to the monument, demonstrates the challenge and the difficulties of communicating public history. Presenting topics such as John Brown's raid, slavery, and the Civil War to 500,000 visitors annually has helped the park gain valuable experience in conveying controversial subjects in an objective and sensitive manner. This allows visitors to draw their own conclusions about history that happened in Harpers Ferry.

Today, the town of Harpers Ferry is a destination in itself. West Virginia's low property taxes, affordable housing, and convenience to metropolitan Washington, DC, have turned the town into a commuter suburb whose residents zealously protect the town through an active historic landmarks commission. Tourists enjoy visiting the park as well as fishing on the Potomac and Shenandoah rivers or hiking and biking along the C&O Canal, and walking the Appalachian Trail. Tourist-oriented shops attract people who just want to escape and enjoy the spectacular scenery, now free from the grime, noise, smoke, and disease that accompanied 19th-century industrial towns located in valleys.

All these competing interests may not be unique for a national park, but it is important to remember that they take place primarily within the few blocks that make up the Lower Town. While the National Park Service owns far more

acreage, much of it is steeply wooded hillsides that are documented to record the historic scene at Harpers Ferry through various archeological and cultural landscape reports (CLRs).

Because of this rich history of cultural resources, the NPS has devoted an issue of *CRM* to Harpers Ferry NHP. I agreed to contribute because Harpers Ferry offers an interesting case study of the variety of resource management issues that all parks face. In 1985, I was one of the non-NPS people at a CRM workshop held at the Mather Training Center. In 1988–89, I was a member of the National Parks and Conservation Association's Commission on Research and Resource Management Policy for the national park system. Two of our basic tenets were that all parks have both natural and cultural resources and that resource management had to take place in an ecosystem context. It would be easy to say that cultural resources clearly dominate at Harpers Ferry NHP, but the recurrent flooding along the Potomac and Shenandoah rivers proves that the forces of nature can easily destroy what people build, particularly because there is no flood control on the vast drainage area of the Potomac and Shenandoah rivers.

Several major ideas emerge from these articles that seem to guide resource management at Harpers Ferry NHP, specifically, interdisciplinary cooperation, planning, and partnerships. Interdisciplinary efforts are prominent in several articles, particularly in the development of CLRs and plans for museum exhibits. NPS personnel with a wide variety of expertise must cooperate to manage the multiple cultural resources at Harpers Ferry, ranging from such rare items as John Brown's family Bible to newspapers and court records, 19th-century buildings, artifacts from the site of an armory worker's home, and the ruins on Virginius Island. Not mentioned here, but still important, are the artifacts that document prehistoric inhabitants of this valley. Much time, energy, and money has gone into planning to protect these resources.

Some Harpers Ferry NHP partners are other NPS offices such as Mather Training Center, the Denver Service Center, and the Williamsport Preservation Training Center. Although not stressed in this issue, Harpers Ferry NHP also has a strong cooperative bond with the adjacent C&O Canal National Historical Park. This relationship takes a variety of forms: the exchange of interpreters between the two parks; mutual assistance with law enforcement, rescue, and resource protection matters; the participation of both parks in funding the highly successful PARTNERS program focusing on creation of a curriculum for teacher use of the parks as classrooms; and the exchange of staff and equipment to deal with the extensive flood damage inflicted upon both parks in January of 1996. Indeed, the two parks are quite literally connected by a bridge span named in memory of former Maryland Congressman Goodlowe E. Byron. Constructed as a cantilevered pedestrian walkway attached to an existing railroad bridge, this foot bridge links the two parks across the Potomac at Harpers Ferry. This bridge actually adds a third park to the partnership because it is also a designated portion of the Appalachian Trail that stretches 2,200 miles from Maine to Georgia.

The articles also reference multiple non-NPS partners, including the University of Maryland, the West Virginia University Institute for the History of Technology and Industrial Archaeology, architectural and engineering firms, and state historic preservation offices. Many of these partnerships take place for specific projects. This fact speaks to the importance of working closely with partners to fully inform them of the manner in which their specific work fits into a broader plan for Harpers Ferry NHP.

Perhaps the most important partner is the U.S. Congress. Harpers Ferry NHP was one of the two sites that the new Advisory Board on National Parks, Historic Sites, Buildings and Monuments reviewed at its first meeting in February 1936. The board considered identifying sites that represented a set of themes of American history, and former NPS historian Verne Chatelain suggested Harpers Ferry to represent the theme of the coming of the Civil War.[1] The NPS was responding to the requests of Rep. Jennings Randolph (D-WV), who, with Storer College President Henry T. McDonald, looked to the idea of a park after a flood damaged the town.[2] Congress authorized Harpers Ferry National Monument in 1944 and it became a national historical park in 1963.

Following Randolph's early interests in Harpers Ferry NHP, Sen. Robert C. Byrd (D-WV) for more than 30 years has helped fund the restoration of the park—West Virginia's best-known landmark—including those years he served as Chairman of the Senate Appropriations Committee. Senator Byrd has shown a keen interest in American history, personally demonstrated by his authorship of a history of the United States Senate. In legislative terms, his interest in preserving history has been expressed nationally in support of National Park Service programs and locally through his interest in advancing the restoration of Harpers Ferry NHP. Given his recognized leadership role in the U.S. Senate, he has

Jefferson Rock and the Shenandoah River, 1890–1895. Courtesy Harpers Ferry NHP.

been an invaluable ally in the development and restoration of Harpers Ferry as a unit of the national park system.

Harpers Ferry NHP also cooperates with the town's local government and its year-round residents. NPS signs mark the entrances to the park, but how many visitors think the John Brown Wax Museum may be part of Harpers Ferry NHP, or that the NPS may have approved the Coca-Cola machine "camouflaged" by a wooden fence? The process of effectively blending what is in the park with what is outside it is shared with the town's historic landmarks commission and the local residents who work cooperatively with the park to preserve the town's historic character. This effort to achieve aesthetic harmony between the park and the surrounding area is one of the many issues that Harpers Ferry NHP—like all national parks—faces in its ongoing effort to maintain a strong cooperative partnership with the local community.

While these articles provide fascinating case studies, they also raise some questions. Harpers Ferry NHP has sought funding for a General Management Plan (GMP), but has yet to be selected from the servicewide list of parks requesting the completion of such plans. In the absence of a GMP, the 1980 Development Concept Plan and the 1987 Resource Management Plan guide park development. Until such time as the park completes a GMP, these plans provide the maximum possible coordination among the planners and the implementation of their plans. However, a GMP—or some other comprehensive, park-wide plan—would provide the park with a useful tool to supplement current efforts to manage a collection of cultural resources that are among the most diverse in the national park system.

Harpers Ferry NHP also has to constantly deal with the fact that, during the critical early years of park development, the interpretive focus was John Brown's raid. Because the National Park Service was then focusing on only a moment in time, it demolished post-Civil War buildings that would now be restored to help interpret the story of the development of the 19th-century town and reflect the social history themes historians have discussed for the past 30 years. That early focus on the raid meant that Harpers Ferry NHP did not adequately interpret resources like the Storer College buildings located a steep walk up from Lower Town, so that too few visitors venture there. Proposed restoration projects in the Camp Hill section of the park offer hope that the former campus of Storer College will someday become a larger part of the Harpers Ferry visitors' experience.

Other threatened resources are beyond the control of Harpers Ferry NHP. For example, in June of 1995 the Roman Catholic diocese closed the historic St. Peter's Church in Harpers Ferry, a wonderful cool respite for visitors and an excellent example of 19th-century architecture. Furthermore, the park must struggle with the protection of an area outside the park known as School House Ridge. This area played a critical role in Stonewall Jackson's successful effort to

outflank federal forces vainly attempting to defend Harpers Ferry in 1862. Despite this undeniable historical significance, this area is threatened by a variety of development activities. The park responds to those threats by partnering with a variety of groups concerned about the preservation of Civil War battlefields and also by leading tours and educational programs which help to keep the historical significance of School House Ridge in the public eye.

Also adjacent to the park is the Murphy Farm. After the conclusion of the 1893 Columbian Exposition in Chicago, Alexander Murphy saved the John Brown Fort from possible demolition when he purchased it from the exposition organizers and moved it to his farm just outside Harpers Ferry. In 1906, the fort figured prominently in the second Niagara Conference in Harpers Ferry when W.E.B. Du Bois led a group to the farm to see the building where John Brown and his men sought refuge after launching their insurrection against the institution of slavery. The park continues to cooperate with the descendants of Alexander Murphy to preserve this important site that is adjacent to the park boundary, but still intimately connected with the Harpers Ferry story.

Harpers Ferry NHP, and all parks, need to continue to educate their visitors about the fragility of these resources, the planning necessary for their protection, and the need for public support to fund that study and protection. This theme may be as important as the official interpretive themes of environment, transportation, industry, John Brown, the Civil War, and African-American history.

But Harpers Ferry is more than the result of careful planning. It is a magical place, as Superintendent Donald W. Campbell points out, and, through the "magic" of the internet, you can visit Harpers Ferry NHP through the park's superb home page on the World Wide Web. Computer graphics, though, cannot capture the steepness of the hills on a hot humid day, the rush of the water at flood time, or the echo of a gun shot through the valley. For that, you'll have to visit Harpers Ferry in person and be glad that Harpers Ferry NHP, like most historic sites, makes no attempt to recreate all aspects of a 19th-century industrial town!

Notes

1 Charles B. Hosmer, *Preservation Comes of Age: From Williamsburg to the National Trust, 1926–1949*, vol. 1 (Charlottesville, Va.: University Press of Virginia, 1981), 596-597.

2 Ibid., 664-668.

Barbara J. Howe is Chair, Department of History, and Director, Public History Program, West Virginia University.

Printed on recycled paper

CRM

VOLUME 19 • NO. 5
Cultural Resources
Washington, DC

U.S. Department of the Interior
National Park Service
Cultural Resources
P.O. Box 37127
Washington, DC 20013-7127

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

FIRST CLASS MAIL
Postage & Fees Paid
U. S. Department of the Interior
G-83