CRM

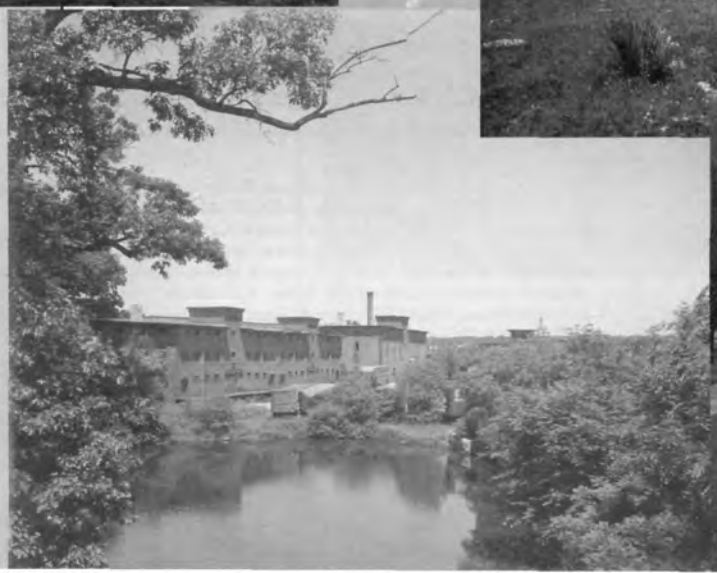
VOLUME 17 • NO. 8
1 9 9 4

National Heritage Area

"A region where natural, cultural, historic, and scenic resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity, shaped by geography."

—National Coalition for Heritage Areas

(See article, page 3)



Cultural Resources Management Information for Parks, Federal Agencies, Indian Tribes, States, Local Governments and the Private Sector

U.S. Department of the Interior
National Park Service
Cultural Resources

CRM

VOLUME 17 • NO. 8
ISSN 1068-4999

Published by the National Park Service to promote and maintain high standards for preserving and managing cultural resources.

Director
Roger G. Kennedy

Associate Director
Jerry L. Rogers

Editor
Ronald M. Greenberg

Production Manager
Karlota M. Koester

Advisors

David Andrews
Editor, NPS

Joan Bacharach
Museum Registrar, NPS

Randall J. Biallas
Historical Architect, NPS

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
Deputy State Historic Preservation Officer, Maryland

Bruce W. Fry
Chief of Research Publications, National Historic Sites Canadian Parks Service

John Hnedak
Architectural Historian, NPS

H. Ward Jandl
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

Consultants

Michael G. Schene
Historian, NPS

Kay D. Weeks
Technical Writer-Editor, NPS

Contents

Features

The Heritage Area Phenomenon 3
Where it is Coming From
Paul M. Bray

The Mouse That Roared 5
Rediscovering Partnerships for New National Historic Sites
G. Brian Woolsey

Anthropology Lab 2470-01 10
Bonni Bruce

The Labor History Theme Study 12
A New Paradigm for Management
Harry A. Butowsky

Agent of Change 13
The Matewan Story
Michael Creasey

Lost Heritage 15
WWII Battlegrounds in the Pacific
J. Steven Moore

The Incorporation of Digital Images into an NPS Photo Archive System 20
Walter Wait

Digitization and Archival Information 21
Diane Vogt-O'Connor

Using "Tourism" as a Context for Historical Archeology Sites 25
An Example from Yellowstone National Park
William J. Hunt, Jr.

ICCROM... that's an interesting acronym! 29
Richard J. Cronenberger

Knight Foundry 31
Water Powered Foundry & Machine Shop—Since 1873
Ed Arata

Current Issues in Archeological Protection for the Department of Justice 33

Preparing for the 50th Anniversary of Guam Liberation 35
Metals Conservation Course and Demonstration Project

Departments

Viewpoint 37
Preservation Resources 37
Bulletin Board 38

Cover photos: 1. Wheeling Suspension Bridge spanning the Ohio River, Wheeling, WV. Photo by William E. Barrett for HAER, NPS, 1976. 2. Fossil Butte National Monument, WY. Courtesy, National Coalition for Heritage Areas. 3. Cambria Iron Company, blast furnaces No. 5 and 6, Cambria Iron Works, Johnstown, PA. Photo by Jet Lowe for HAER, NPS, 1987. 4. Dairy farm, Iowa. Courtesy, National Coalition for Heritage Areas. 5. Recreation Park Carousel, New York. Courtesy National Coalition for Heritage Areas. 6. International hand-pulled ferry, Lower Rio Grande River, Texas. Courtesy, National Coalition for Heritage Areas. 7. Piedmont Charcoal Kilns, Evanston, WY. Courtesy, National Coalition for Heritage Areas. 8. The Blackstone Canal, Providence to Woonsocket, Rhode Island. Photo by Jack E. Boucher for HAER, NPS, 1971. 9. Ohio and Erie Canal, Ohio. National Historic Landmark file photo.

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* (400), U.S. Department of the Interior, National Park Service, Cultural Resources, P.O. Box 37127, Washington, DC 20013-7127; (202-343-3395).

The Heritage Area Phenomenon

Where it is Coming From

Paul M. Bray

Heritage areas (a.k.a. urban cultural parks, heritage parks and corridors, and partnership parks) are an accelerating phenomenon. A national coalition has been organized to promote them and legislation to establish an American Heritage Areas Partnership Program (H.R. 3707) is making its way through the "gridlock" Congress in a remarkabley quick fashion.

Yet, even within the park and historic preservation communities there is little understanding of what heritage areas represent. There is something "feel good" about heritage areas because there is something (preservation, recreation, education, and economic development) for everyone which has helped fuel their growth. But there is also the confusion and doubt which led one National Park Service official at a public meeting to ask when are heritage areas going to end.

Heritage areas don't fit neatly within any concept or specialization we are familiar with and do, in fact, represent a sea change in traditional notions of parks and historic preservation. Planning, development, and management of heritage areas requires the coordination of many specialized skills including those of architects, landscape architects, planners, historic preservationists, educators, and tourism and economic development specialists to address the intricate relationships found in a living landscape encompassed in a heritage area. A positive consequence of this circumstance is the opportunity to enlarge the dimension of specialized skills by linking up disciplines. But it has left heritage areas to be an orphan without one specialized profession able to claim it as its very own.

The Conservation Foundation in its report entitled *National Parks for a New Generation* identified the phenomenon as a move beyond the feature to the entire setting. Under the heritage area approach, the notion of a park as a place separate and apart where nature is presumed to reside becomes instead an inhabited urban setting or region. This is not really a new idea. The century-old Adirondack Park in New York State has more than 50% of its land held in private ownership and European national parks are inhabited parks. But clearly the American park tradition is a tradition of the public estate park supported, in part, by a pastoral myth.

To better understand the meaning and significance of heritage areas it is useful to examine some of the societal forces that are driving and steering this new concept and approach.

First and foremost, heritage areas are an outgrowth of the environmental age, a time for sustaining rather

*(**Bray**—continued on page 4)*

In recent years a new philosophy of historic preservation has begun to emerge—heritage area preservation—which seeks to preserve entire ecosystems of cultural and natural resources for the enjoyment and benefit of the American people. While most heritage areas are organized around a distinctive large-scale resource such as Lowell National Historical Park, others may be natural resources such as a river, lake, or range of hills such as RiverSpark in New York; or a cultural resource such as a canal, railroad, or road illustrated by the Illinois and Michigan Canal; or may be cultural resources abandoned or in disrepair such as sites associated with the abandoned steel mills of Western Pennsylvania. Most of these sites, such as the cultural parks of New York along the Mohawk River Valley, illustrate the heritage area preservation idea which combines urbanism with cultural and natural resource preservation—linking urban culture, an emphasis on linkage and civic engagement, and enhanced public realm making city life enjoyable and a civilizing experience. While the new model of heritage preservation is still in an inchoate stage, its rewards are now becoming visible. Today, many more parks are following the example of Lowell National Historical Park and the New York urban cultural parks system. What these areas have in common is that they form part of a creative nexus based on partnership agreements between private individuals and organizations, and local and state governments to manage and come to terms with modern urban landscapes.

The Hudson-Mohawk Urban Cultural Park (HMUCP), or RiverSpark as it is commonly known, for example, is in the northern section of the heritage area proposed to be established by the Hudson River Valley American Heritage Area Act (H.R. 4720). The HMUCP Commission was organized in 1977 by a bi-partisan group of mayors and supervisors of the neighboring cities of Troy, Cohoes, Watervliet, the towns of Waterford and Colonie, and the villages of Green Island and Waterford. This local initiative was the model for the New York State Statewide Heritage Area System, and today RiverSpark is one of 14 state designated urban cultural parks.

One of the early supporters of the heritage area concept is Paul Bray, an attorney and special advisor to the Hudson Mohawk Urban Cultural Park Commission. Mr. Bray has written extensively on this subject and a discussion of his views on the heritage area phenomenon can be found in the accompanying **Viewpoint** article.

—HAB

Harmony Mill No. 3 (1868-1872), HMUCP. The Hudson-Mohawk region of New York, the home of RiverSpark, has been called "a Birthplace of the American Industrial Revolution" and was considered to have one of the most diverse economies in 19th century America. Its rapid growth and transformation from an agrarian society to an industrial powerhouse is attributed to its geographic location, abundant waterpower, creative industrialists, and a large and ethnically diverse work force of men, women and children.

(Bray—continued from page 3)

than exploiting resources and pursuing the consumption based development model. Heritage area planning is holistic, resources based, and in keeping with the idea that people's true heritage is the entire Earth. It links the natural with the cultural and the past with the present and the future. If an ecologically and culturally sustainable society is still more of a vision than a reality, the vision has a useful vehicle in heritage areas to carry forth its principles.

The heritage area idea is also a response to the surfeit of sameness of sprawlscape and the despair that marks the discarded industrial landscape. Pat Mogen, the pioneer advocate for the Lowell Urban Cultural Park, talked of transforming a gritty city from a place where everything is dull into a place where everything is interesting. The idea spread as people realized that their city and region have the story of their cultural and natural heritage to tell, and organizing to become a heritage area is a means to bring out the specialness of their locale. Perhaps a bit like the city beautiful movement, the heritage area phenomenon can be viewed as the city or region as a special and interesting place movement.

Heritage areas carry on an urban park tradition of serving society's need for integrating and unifying forces. Olmsted's pleasure grounds were intended to attract and equally serve all citizens from all social groups and be an integrating force in a democratic society. By finding recreational and educational potential in all parts of the urban landscape—workplace, living quarters and streets—heritage areas provide a broader context to serve all social groups and in the process bring vitality to cities.

Olmsted also advocated and planned systems of complementary parks and parkways in cities like Boston and Buffalo to provide not only varied pleasure and recreation grounds throughout the city, but in addition to redeem disagreeable environs and prevent random spill of city expansion. Olmsted believed it was an error to regard a park as something complete in itself. Increasingly, parks as heritage areas encompassing whole settings and landscapes are becoming a major unifying force in urban and regional planning. The National Park Service is bringing national park philosophy, policies, resource management skills, and park professionalism to give reality to underlying unity of resources in regional settings like Gateway National Recreation Area, Cuyahoga Valley National Recreation Area, the Illinois-Michigan Canal Heritage Corridor and the Blackstone River National Heritage Corridor.

Although home rule localism and regionalism often conflict, heritage areas arise because of a conjunction between the desire for stronger local voice in governance as well as a desire for regional solutions. Heritage areas have clearly been a bottom up phenomenon. Local citizens and organizations have sought to capitalize on their heritage. They have formed alliances and sought partnerships with state and federal authorities. Although locally driven, it has not been limited by local political boundaries which have defined the playing field of home rule. Rather in keeping with the aforementioned environmental age factor, the local playing field is being defined by natural and cultural heritage and is therefore frequently regional.

Finally, heritage areas are a response to a societal need to reconcile conservation and economic imperatives. Economics have always been a factor in park making. Some parks were established because the land they encompassed had no development value. Other parks were established with the hope that they would enhance the real estate value of neighboring property. In a letter to me, Michael Hough, landscape architect and author of *Out of Place* wrote "...the early British parks were based on the idea of transferring the countryside to the city, but without the overriding basis that maintained that rural environment in the first place—the economic imperatives of agriculture and land management. In this sense again, I find your cultural parks, that encorporate economic viability into their structure, most interesting." By addressing economic viability upfront with conservation goals, we gain parks or heritage areas that are living settings managed to foster both inherent values of conservation and sustainable economic activities. The heritage area planning and management process has institutionalized collective efforts for conservation and economic viability by enlisting the participation of conservation and economic interests.

These driving societal forces have countervailing forces not the least of which are based on tradition. Parks are a conserving and conservative force which does not easily accept change. Parks have been separate and apart from working and residential landscapes and a product of a pastoral myth. To say now that a park may be a city or a region is disorienting to say the least. But that is what is happening.

Whether the American Heritage Areas Partnership Program bill is enacted this year or not, it still will have achieved remarkable success in the legislative process. This success should not surprise anyone who realizes the driving societal forces at work. Heritage areas are the parks for an environmental age, for people seeking to be more uplifted by and attached to their local and regional landscape, and for a society in dire need of socially integrating and physically unifying forces, and of finding the conjunction between conservation and economic viability.

Paul M. Bray is an attorney from Albany, NY. He was a founder of the Hudson Mohawk Urban Cultural Park, has lectured and written on the subject of heritage areas, and will be teaching a course in environmental heritage planning at the State University of New York at Albany.

Photo page 3: Cohoes Falls, Mohawk River, HMUCP. Photos courtesy Ann Luby, RiverSpark.

The Mouse That Roared

Rediscovering Partnerships for New National Historic Sites

G. Brian Woolsey

It was little more than 15 years ago that Parks Canada proclaimed that it managed the "Crown Jewels" and that Canadians could be justifiably proud of their collective heirlooms. Canada's acquisition and management of its national parks (natural areas) and national historic sites (historical places) were historically viewed as the logical and most effective approach to heritage conservation and presentation.

Parks Canada has found that this traditional route is expensive and inflexible. Our agency has launched a bold and multifaceted experiment in heritage partnerships, one that will certainly challenge our ancient shibboleth that ownership equals effectiveness. The particular focus of this paper will be partnerships in cultural resource management, but many of the same arguments could be made for other aspects of our mandate, including the establishment of new natural areas and the management of existing parks and sites. A consensus is emerging within our program that partnership is not only a cost-effective strategy for protecting the national heritage, it may well be a more effective approach, period.

Not all World Heritage Sites in Canada are managed by Parks Canada; Head-Smashed-In Bison Jump is managed by the Province of Alberta.

Current System of National Historic Sites

The national historic sites system currently includes some 129 operating sites which are visited by some 6.8 million people annually. Beginning in 1972, several heritage canals were also transferred to Parks Canada, and these corridors receive about 710,000 visitors a year.[1] The flagship of national historic sites is the magnificently reconstructed Fortress of Louisbourg, representing an 18th-century fortified town in Cape Breton, Nova Scotia. Parks Canada also operates Artillery Park and the 18th-century fortifications in Quebec City, the historic capital of the French Empire in North America until 1759.

The Halifax Defence Complex attests to the lengthy British military presence in Canada. The complex is composed of individual sites located in and around Halifax, Nova Scotia, covering the period from the founding of this superb harbour community in 1749 to WWII. Other elements of Parks Canada's historic sites system include the Rideau Canal, in eastern Ontario, which contains the best preserved canal technology in Canada; Lower Fort Garry, near Winnipeg, the only surviving stone fur-trade post in Western Canada; and Dawson City, in Yukon, once called the "San Francisco of the North" by virtue of the extensive, but short-lived, settlements there as a result of the Gold Rush of 1898.

Most of the provinces and territories also operate historic site programs, many of which protect and present sites of provincial significance, but occasionally sites of national and even international significance, such as the Head-Smashed-In Bison Jump in Alberta. The latter is a World Heritage Site, as is the early-11th-century Viking settlement of L'Anse aux Meadows, in Newfoundland, administered by Parks Canada.

Cultural Resource Management

Cultural resources in Parks Canada are managed according to the Cultural Resource Management Policy. The Historic Sites and Monuments Act of 1953 forms the legislative basis for Parks Canada's system of cultural resource management (CRM). This legislation formally establishes the Historic Sites and Monuments Board of Canada as advisors on historical matters. Specifically, the Board (or HSMBC) recommends to the Minister responsible for Parks Canada whether a particular historic place is of national historic significance. "Historic" significance in this context also embraces national architectural or archeological significance.

For sites evaluated as nationally significant, further Board advice is sought as to the level of recommended involvement: commemorative plaque, cost-sharing agreement, or property acquisition. As an index of the Board's effectiveness in screening sites, of the 6,000-odd applications for national commemoration since 1919, only approximately 1,000 have been declared nationally significant.

Of these, only slightly over 200 have been recommended for financial investment by Parks Canada: 90 for cost-sharing agreements and over 100 for acquisition. Over 5,000 potential sites were thus considered not of national significance by the Board; for these sites, there would be no further involvement by Parks Canada.[2]

Members of the Board include residents from each province and territory in Canada, with an additional member for Ontario and Quebec and an *ex-officio* member

*(**Woolsey**—continued on page 6)*

(Woolsey—continued from page 5)

from the National Archives and the Canadian Museum of Civilization. Members tend to be experts in the key cultural resource or heritage conservation disciplines. The Board's excellent academic reputation has proven invaluable in ensuring that its recommendations are credible with the heritage community in Canada.

The Board assists Parks Canada in determining the commemorative intent for each site administered by Parks Canada. In other words, the HSMBC presents its historical rationale for site designation and defines the key representative resources at each historic place. If the Minister responsible for Parks Canada accepts this advice, as is almost always the case, the site is designated a national historic site.[3]

The reconstructed buildings at L'Anse aux Meadows, an early-11th-century Viking site is both a World Heritage Site and part of the system of national historic sites managed by Parks Canada.

These representative resources are then accorded Level I or priority status in any subsequent research, planning, or development programs proposed for the designated site. This approach helps ensure that the major themes and resources at a national historic site, the very things that caused this place to be selected in the first place, are suitably recognized in all aspects of its programs.

Early Partnership Efforts, 1972-1984

Parks Canada's CRM Policy is proving useful in providing both a guiding philosophy and workable management parameters for national historic sites and heritage canals owned and operated by Parks Canada. What remains to be determined, however, is how this system of CRM operates within a partnership context. Although the new policy emphasizes that CRM applies to co-operative arrangements, how can this be done in a situation where policy decisions have to be negotiated, not promulgated?

In 1972, Parks Canada formally recognized the need for a co-operative approach to heritage with the launching of the Byways and Special Places Program. The Agreements for Recreation and Conservation Program (or ARC Program), as it came to be known in 1974, was announced as a major new initiative and a separate Parks Canada program, which would be managed and operated on an equal basis with the National Parks and National Historic Sites Programs.

Specifically, ARC was mandated to manage the nine heritage canals, such as the Rideau Canal, transferred to Parks Canada from the Department of Transport, and to carry out feasibility studies in co-operation with provincial and territorial agencies on various linear corridors and heritage areas. ARC studied potential initiatives from a number of vantage points: natural and cultural significance, and scenic and recreational potential.

This program clearly held out great promise, for it recognized the pivotal role played by provinces and territories in designing the support infrastructure (roads, tourism facilities and services, development of compatible attractions) essential to the successful management of heritage attractions. For a while at least, that promise was fulfilled. Agreements were signed with the Province of Ontario for the Trent-Severn and Rideau canals in central and eastern Ontario in 1975, for the Red River in Manitoba in 1978, and for the Mackenzie Trail in British Columbia in 1982.[4]

These agreements had a clear cultural resource focus, for the Rideau-Trent-Severn dealt with major historical transportation corridors in the heart of Ontario, the Manitoba Agreement with sites associated with the fur trade and Red River Society around Winnipeg, and the Mackenzie Grease Trail with an important 19th-century interior fur-trade route in British Columbia.

While these agreements are now at least 10 years old, they are still regarded as models in intergovernmental integration. The Red River Agreement, for example, links the Parks Canada sites in the Winnipeg area, such as Lower Fort Garry, St. Andrew's Rectory, and the junction of the Red and Assiniboine rivers, with thematically related sites operated and managed by provincial and municipal agencies. The result is a co-ordinated presentation of historical and recreational attractions in and around Winnipeg that allow visitors a comprehensive glimpse into the rich history of the Red River Settlement without the usual duplication or competition in attractions and services that seem to characterize many heritage regions.

Unfortunately, agreements were signed only for the three areas cited above, despite numerous other initiatives that had significant appeal. In 1984 the ARC program was cancelled and its former components were redistributed between the National Parks and National Historic Sites Programs.

The demise of ARC has been attributed to various causes, not the least of which, in the author's opinion, was the stubborn persistence of an ownership culture in Parks Canada that had remained deeply rooted and relatively uncomfortable with the compromises and delays that frequently accompany co-operative approaches. Partnerships meant sharing the political limelight, which at that time Parks Canada appeared not anxious to do.[5]

A chronic problem, as well, in gaining provincial approval for ARC initiatives was the lack of an opera-

The Saint John Market's economic feasibility was ensured when glass enclosures were erected to provide additional sales space in the building. The HSMBC-designated portion of the structure was the interior, not the exterior.

tional budget. This meant that joint federal-provincial facilities could be planned and built by virtue of federal capital funding, but that operating and maintaining them was the responsibility of the provinces or other partners.[6] This precondition led to the collapse of many negotiations, as operational resources are usually the most difficult for cash-strapped governments to find. Finally, for the Atlantic Provinces, the 50/50 formula for federal cost-sharing proved quite unattractive, particularly when the federal portion for other programs was as much as 90% of the total cost.[7]

Background to the National Cost-Sharing Program

The ARC Program had just been buried when Parks Canada faced the direct challenge of a substantially reduced budget with the election of the Progressive Conservatives in 1984. Parks Canada suffered a significant reduction of some $36 million, or approximately 20% of its capital budget for the period 1985-88.[8] The new government put into place mechanisms to eliminate any new spending initiatives without new funding and explicit Cabinet and Parliamentary authorization.

Partnership: A Flexible Heritage Conservation Option

This, however, is not the whole story. In the author's opinion, our shift towards partnership as the preferred paradigm was not exclusively, nor even primarily, driven by financial considerations. When properly managed, co-operative mechanisms can be applied in a more timely fashion and to a wider variety of cultural resources than the legalistic, time-consuming, and sometimes unpopular site acquisition-development route. Through partnership, cultural resources can be managed more effectively.

The National Cost-Sharing Program, 1986

The National Cost-Sharing Program received policy approval in 1986 and was formally established and funded at $1 million a year in 1987. At the time, eligible recipients for financial assistance were provinces, territories, municipalities, and private non-profit groups. No provision is made for operational assistance under this program, as its exclusive focus is historical resource conservation. Selection of candidate sites is the role of the HSMBC, and the maximum Parks contribution is 50% of the total restoration/site-acquisition costs and $1 million per project. Period reconstructions are ineligible for financial assistance, and cost-sharing sites cannot be owned by Parks Canada.

The principles and practices of CRM apply to this program. Adherence to CRM is ensured by requiring that the partner prepare a comprehensive conservation report before undertaking any physical interventions on the site.

The report presents the rationale and underlying database supporting works of stabilization, restoration, renovation, and modern adaptation. The implications of any proposed interventions to a historic structure or landscape must be pre-tested by the necessary research studies, exactly along the lines stated in Parks Canada's CRM Policy. Thus, studies such as an overview structural and/or land-use history of an area, a physical assessment of the heritage buildings and/or landscape, may well be necessary. Archaeological testing may also be necessary.

To encourage our partners to undertake such research, the costs for these analyses are potentially eligible for cost-sharing. Parks Canada will, however, only reimburse its partner for the research costs if the conservation report is approved.

Further, although by definition conservation reports concentrate on the impact of interventions on historic resources, they must also deal with the contemporary features of a site, such as how it will be used, managed, and maintained. The draft report is reviewed by planners and CRM specialists in Parks Canada's regions and headquarters, and if judged unacceptable, cost-sharing funding is withheld until the report is appropriately amended.

A final defining characteristic of conservation agreements is the application of the so-called heritage character statements. Heritage character statements define the critical components of a site from the vantage point of the HSMBC. This guides Parks Canada planners and managers in negotiations with our partners, for it provides a clear sense of a site's nationally significant elements, and by implication, those heritage components which might have to be modified or adaptively reused. These "trade-

*(**Woolsey**—continued on page 8)*

The administration facility (far right) added to the St. Thomas, Ontario, City Hall was designed in 1988.

(*Woolsey—continued from page 7*)

offs" are frequently inescapable in order to arrive at a conservation report satisfactory to everyone.

Thus, while compromise is inevitable in partnership, the conservation program is structured to ensure that nationally significant heritage values—those which must receive the highest priority under CRM—are not sacrificed in the negotiations process.

Early Partnership Venture

The Saint John Market in New Brunswick has been restored, rehabilitated, and effectively recycled, and its heritage components have been respected, despite the fact that Parks Canada footed only one-sixth of the total project cost of $6 million. The market's surviving interior was defined and respected in the conservation report and subsequent renovations as the key heritage component of national significance.

The market's exterior walls were proposed for modification to permit additional vending units, which were to be housed in glass enclosures. Parks Canada was able to reduce the magnitude and visual impact of these additions, to ensure the visual congruity of the building from most viewing vistas.[9] Although some heritage purists might well have decried this external cladding altogether, the choice for the city was either increased revenue, afforded by the additional commercial space, or razing the building altogether and replacing it with a modern facility.

As one of Parks Canada's first partnership ventures, staff agonized over the Saint John Market development concept. Ultimately, it was decided that since the nationally significant elements were being respected, the external enclosures were an acceptable quid pro quo. Ironically, the market project was cited in 1988 for a design award by the Heritage Canada Foundation. The Foundation functions as a heritage watchdog in Canada.

Not all projects have been that successful. As might be imagined, with over 20 conservation projects between 1987 and 1994, we have experienced some reverses as well. For the St. Thomas City Hall, for example, we found it very difficult to change the conservation philosophy of this project once the planning and design assumptions had been approved by the city. Our agency was presented with a modern adaptation to the city hall that, to our way of thinking, was incongruous with the rest of the structure. We were in no position to disentangle ourselves from an agreement, however, having made no comments at the time this design was being vetted. CRM was not at stake, but our reputation as a sensitive heritage agency certainly was at issue.[10]

As a direct result of swallowing that design solution, we will no longer participate in projects for which a conservation philosophy has been established without our input. Parks Canada is either involved from the beginning or not involved at all.

Expanded Program of Cost-Sharing Agreements, 1990

The minor blemishes we experienced with the 1986 program did not dissuade us from an aggressive pursuit of partnership opportunities. In 1990, under the umbrella of the Green Plan, we initiated an expanded cost-sharing program which would provide assistance for both conservation and presentation elements. The Green Plan was a Government of Canada thrust to improve the Canadian environment, including initiatives to complete the national parks system and to commemorate unrepresented historic themes.

An additional $7.1 million was allocated for this new variation of the National Cost-Sharing Program for the period 1991-1997. By virtue of a conscious policy change, the list of eligible recipients of cost-shared assistance was expanded to include the private sector. Except for the prohibition on site ownership and the restricted capacity to assist site operations (maximum period of 10 years), the conservation and presentation program has many of the characteristics of a traditional, operating national historic site.[11]

The McLean Mill in Port Alberni, B.C., in the 1930s. (From the collection of the Alberni Valley Museum, Port Alberni, B.C.)

The McLean Mill is the first major initiative to be undertaken under this program. The mill is located near Port Alberni, on the west coast of British Columbia. Port Alberni has historically been associated with the lumbering and pulp and paper industry. The mill was built in the period 1920-1940, when the British Columbia forest products industry was in full swing. It was chosen by the HSMBC to commemorate the theme of lumbering in British Columbia because it is the last surviving mill located on Vancouver Island that contains machinery and equipment from the 1920-1940 period.[12]

The credible interior layout of the mill property is paralleled by the site's surrounding land use. McMillan Bloedel, a giant lumbering corporation in British Columbia, carries out logging operations in the adjacent highlands. McMillan Bloedel, historically an associate of the McLean family, originally owned the lands encompassing the mill and transferred them to Port Alberni in 1991. The city, in return for the lands, agreed to develop the abandoned structures as a historical site and then

Some of the equipment that has been painstakingly restored by Port Alberni volunteers for display at the mill.

invited Parks Canada and the province to co-operate in a multi-agency development scheme.

Barely two years after the HSMBC recommended co-operative action on McLean Mill, Parks Canada was sitting down with provincial and municipal officials to develop a program for interim resource conservation measures, site research, and management planning for this site. Urgently needed conservation work was undertaken in 1992 and 1993, thus preventing the mill structure itself from collapse. Partnership appears to permit timely responses to short-term problems.

The key outstanding issue for the McLean Mill will be whether or not this project meets the requirements of CRM. The litmus test will be the management plan, which will function for conservation and presentation agreements exactly as a conservation report did for conservation agreements. The CRM principles must be applied to this site as much as they would to sites under the direct administration of Parks Canada. Further, the management plan must be attached to, and form part of, the cost-sharing agreement for such sites.[13]

Currently, Parks Canada is in the final stages of co-operative planning for the McLean Mill, and no agreement has been signed yet. It would be premature, therefore, to claim a major victory for co-operative heritage planning just yet. Nevertheless, from our discussions to date, we have learned that if we can patiently explain the underlying rationale for CRM, we stand a very good chance of convincing our partners that such CRM principles as knowledge and respect are the best means of ensuring a site's credibility and therefore its enduring success as a tourism attraction.

Conclusion

Skeptics will not fail to note that, together, both variations of cost-sharing amount to .5% of Parks Canada's operational and capital budget. It is true that we have begun modestly! Nevertheless, so impressed is Parks Canada by the potential of partnerships and convinced that the community or band-based co-operative models are avenues of the future that we will not acquire another historic property unless that is the sole means available to protect a threatened national historic site.

Further, the latent potential of projects such as McLean Mill has alerted our senior management to the almost limitless possibilities inherent in this approach. As a result, partnership will be the preferred avenue for establishing all new national historic sites. As well, planners for national parks, which to date have all been owned by the federal government, are examining the potential of a parallel approach for new natural areas. Finally, a program-wide study is underway to investigate shared management for the entire system of national parks and national historic sites. It seems, therefore, that partnership is not only here to stay, but that it will be much more prominent in the future. In that sense, the National Cost-Sharing Program may be a mouse that roared!

This article has been excerpted from a paper delivered at the Annual Meeting of the National Council on Public History in Sacramento, CA, March 18, 1994.

Photos courtesy Parks Canada.

Notes

1 Parks Canada, *Visitor Use Statistics for 1992-93,* Annual Report.

2 Personal communication, Larry Friend, Executive Director, Historic Sites and Monuments Board of Canada, Hull, P.Q., January 1994.

3 Parks Canada Policies, Draft November 22, 1993, *National Historic Sites Policy,* Role of the Minister, Section 1,1,2, p. 66.

4 Personal communication, Ann Verbiwski, Review Officer, Leasehold Lands, Policy and Audit Division, Realty Services Branch, Parks Canada, Hull, P.Q., Sept. 1993.

5 This reticence became particularly evident, in the author's personal experience, in the latter stages of negotiations over the proposed Saskatchewan Rivers Heritage Complex, a co-operative project oriented around Batoche and provincial sites such as Fort Carlton in the 1981-82 period.

6 Personal communication, Mahlon Robinson, Chief, Management and Operational Planning, Operations Branch, National Historic Sites Directorate, Parks Canada, Hull, P.Q., January 1994.

7 Personal communication, Rob Thompson, Head, National Historic Sites Planning, Policy Planning and Research, Atlantic Region, Parks Canada, Halifax, N.S., January 1994.

8 Personal communication, Paul Hartley, Chief, Financial Planning and Resource Analysis, Finance Branch, Parks Canada, Hull, P.Q., January 1994.

9 *Saint John City Market National Historic Site,* Conservation Report, January 1988, (Parks Canada, Atlantic Region).

10 The design concept was submitted to City Council on April 24, 1988; Parks Canada was not in receipt of a positive HSMBC recommendation on the city hall until January 1986. (Internal Parks Canada correspondence—National Cost-Sharing Program.)

11 Draft Guidelines for Implementing An Expanded National Cost-Sharing Program (November 1993), Parks Canada Publication.

12 Historic Sites and Monuments Board of Canada Minutes, June 1989, pp. 16-17.

13 Draft Guidelines.

G. Brian Woolsey, Chief, New Sites Establishment, National Historic Sites Directorate, Parks Canada, has been involved in national historic sites planning for 20 years.

Anthropology Lab 2470-01

Bonni Bruce

The wind swept through the valley as winter slowly approached. She covered her small child the best she could as her people struggled to get to Mummy Cave, their winter home west of the Pryor Mountains. They had been travelling for many days to get there before the first snows. Her husband, a hunter for the people, told her in two more sunsets they'll stop for winter. She sighs with relief and picks up a few small stones that lie in their path. She is clearing the way for the travois. She throws the stones in piles that lie on either side of the path. It has been done this way on this same path by her ancestors, and it will be done on this same path by her children. This is the path that also will take them back to the Pryor Mountains for the summer. The sun slowly sinks beyond the horizon. The band leaders signal to stop and make camp for the night.

After the snow receded and the ice melted, she was once again on her ancestors' trail. They left their well-protected winter site, disbanded, and moved to hunt and to collect edible plants. Her son was able to walk now. This made it easier since she didn't have to carry him as much anymore. Her job now was to collect bitterroot along the limestone ridges and sego lilies in the sandstone and grasslands. The days were getting longer as the people, calling themselves Apsaalooke or children of the large-beaked bird, migrated toward the tops of the Pryors. By June and through August the mountain tops would lose their snow cover. This is where they will dwell in the summer, among the mountain tops.

The alpine forests and meadows are ideal for hunting and gathering. This year, she felt, would be especially favorable. The snows were heavy, indicating a much moister climate than years before. She looked forward to the lush vegetation and plentiful herds of bison, mule deer, antelope, and bighorn sheep. With these moments the life cycle continued.

The hardships of Native Americans on the Bad Pass Trail through the Bighorn Canyon/Pryor Mountains region is one of the many topics I discovered in a unique class at Northwest College, a community college located in Powell, WY. The class, through the combined efforts of anthropology instructor Doug Nelson and park curator Jon G. James of Bighorn Canyon National Recreation Area (BICA), offers students a chance to handle archeological materials from excavations conducted in Bighorn Canyon NRA during the 1970s and '80s.

What intrigued me most about the class is that it is offered as an anthropology laboratory internship using current professional museum curatorial practices and policies followed by the National Park Service. Since archeology is my major field of study, I jumped at the chance to actually gain lab credit hours and volunteer NPS work experience as an undergraduate at a two-year community college in northwestern Wyoming. (Opportunities like this don't come every day!)

I've always been excited about the past, especially Wyoming's past. I've always wondered, what went on here? What happened, before settlers arrived and before the westward movement?

Lawrence L. Loendorf, Ph.D., presently at the University of Arizona, was the professional archeologist supervising the Bighorn Canyon NRA/Pryor Mountains archeological surveys. He remains one of the leading authorities on the prehistoric and early historic archeology of the Indian tribes who once lived in

Anthropology Internship 2470-01 is designed as a hands-on laboratory project working with approximately 3,600 archeological items from the museum collection of the National Park Service, Bighorn Canyon National Recreation Area.

With the personal guidance and assistance of the park curator and a college instructor, course participants will transfer archeological material from 43 metal ammunition boxes to chemically inert polyethylene bags and curatorial storage boxes, then relabel these bags and boxes with accurate archeological site provenience and new NPS catalog numbers.

It is estimated that it will take approximately two to three semesters to finish the project. Students participating in the course will earn one laboratory credit hour from Northwest College and be signed on as a Volunteer-In-Park (VIP) for Bighorn Canyon NRA. Curatorial supplies and materials will be provided by the National Park Service.

The park curator will provide students an orientation to NPS museum collection policy, the BICA archeological surveys and collection, and to the work requirements of the project during several one hour classroom lectures and discussions. Following this introduction, one hour lab sessions will be held at least once every week during the semester.

The author sorting through bag of chert lithics from Bighorn Canyon NRA Archeological Collection. Photo by Jon Meiners, Northwest College.

Scottsbluff-like projectile point (c. 6,500 B.C.). BICA Archeological Collection.

the area. Over the past 50 years approximately 612 archeological sites have been located in the Bighorn Canyon/Pryor Mountains complex by professional and amateur archeologists. The sites excavated by Loendorf have yielded an abundance of artifacts treated and studied by the NWC internship class.

In his excavation reports, Dr. Loendorf recommended the artifacts be immediately field bagged and labeled. Archeological materials were initially placed in paper sacks, labeled on the outside with site provenience numbers and placed in metal ammunition boxes for temporary storage in the Bighorn Canyon NRA Visitor Center museum storage room. There they remained for over 20 years. The bagged lithic materials were so tightly packed in the ammunition boxes some of the materials were crushed, and, in some cases, the paper bags had broken open. This is what we had to work with.

When prehistoric and historic artifacts were mentioned before the class even started, my eyes lit up with dreams of perfect arrowheads, maybe some beads, and perhaps even a few grinding stones. What we got, in actuality, was tons of chert flakings, cores, and maybe a few hearth samples. Once in awhile I would come across a partial or even perfect projectile point (the correct terminology of artifacts was also learned in class). After brief congratulations by everyone in class—as if I found the point on the ground and thus a new archeological site—Jon would have us look up the origin of the point and relative dates. I discovered this is what the class was based on: **first-hand learning instead of instructor taught.** We had to do the research of the history and then tell our fellow interns about it.

Northwest College student Gretchen Hill studying lithic debris. Photo by Jon Meiners, Northwest College.

Small Hell Gap projectile point (c. 7,000 B.C.). BICA Archeological Collection.

The first several days of class Jon provided us with a general orientation to National Park Service museum standards and policy, the Bighorn Canyon NRA archeological surveys and collections, and the work requirements of the project. Following this, one hour lab sessions were supposed to be held every other week, but with the abundance of material (43 metal ammunition boxes crammed with lithics) and the urgency of getting the crumbling artifacts into chemically inert polyethylene bags and curatorial storage boxes, these sessions were expanded to four hours every week.

The National Park Service-Northwest College internship not only offered me curatorial insights, but a look back at the prehistory surrounding the artifacts. A gradual understanding that natural history is an integral part of cultural history as you work with the materials shaped by hands thousands of years ago. This comprehension led me to an almost critical and complete grasp of man's relationship to Bighorn Canyon. We, like people before us, are merely travelers on a continuum for survival, searching for our place in nature and history.

Bonni Bruce is a Northwest College sophomore.

An article on the Bad Pass by Nancy Oster, also a student in the internship program, will appear in a future issue of CRM.

The Labor History Theme Study

A New Paradigm for Management

Harry A. Butowsky

In a recent article for the newsletter of the Conservation Fund, Director Roger Kennedy discussed the impact of efforts to downsize the National Park Service. "Downsizing means diminishing, and however skillfully done, it will hurt. Plans to reduce the size of agencies of government charged with caring for our common land and with the sites memorializing our common history have many virtues.... But downsizing is not just right-sizing arising from critical re-examination of government.... It is also the consequence of a national consensus that we must devote more of our current income to debt service and less to people service...."

The opportunities and challenges that "downsizing" present to National Park Service management can be seen in the new methods now employed to complete the *Labor History Theme Study*. In 1991, when Public Law 101-102, mandating the *Labor History National Historic Landmark Theme Study*, was passed, the intention and direction of the Congress was clear—the National Park Service was to complete this study through a process involving partnerships within the ranks of organized labor, historic preservation organizations and the community of academic labor historians. This mandate for cooperation with our partners has been followed throughout this study and has important implications for current management techniques used now to administer the National Historic Landmarks Survey.

For example, the National Park Service has initiated a series of partner relationships to support this study as envisioned in Public Law 101-102. In June 1991, more than 50 labor historians, State Historic Preservation Officers, local community and historic preservation leaders, and National Park Service representatives met at Lowell NHP to discuss strategies for implementing the *Labor History Theme Study*. During the three days of the conference the participants gave important guidance and suggestions concerning the direction of the study. Some of this input addressed less-documented aspects of labor history, such as women's work, agricultural work, and the contributions of minority Americans.

After funding for the study was obtained, the National Park Service selected Dr. James R. Grossman from the Newberry Library in Chicago to prepare the study. Dr. Grossman enlisted the best known and most qualified historians in the field of labor history to write the historical thematic essays that form the foundation for the study. The partnership agreement between the Newberry Library and the National Park Service is intended to serve as a model for efficient management by the Service to sustain high quality research while maintaining close adherence to national standards and guidelines through a partnership with a leading academic institution. This approach will enable the service to produce a theme study that will illustrate the latest scholarship in the field of labor history studies with a minimum of cost and oversight.

In an attempt to invite as many organizations as possible to contribute to this study, Dr. Grossman has written to every State Historic Preservation Officer and to over a thousand additional organizations and individuals seeking suggestions for possible labor history sites. These organizations were asked to recommend sites that fit the categories of work processes, events, people, leisure establishments, labor education, workers communities, and labor organizing. In addition, the National Park Service is continuing to hold discussions with local governments and preservation organizations to encourage them to complete nominations. These sites include Matewan and Blair Mountain in West Virginia; Harmony Mills Site, Cohoes, NY; Butte-Anaconda, Butte, MT; Union Square and Amalgamated Houses in New York; Homestead Landing Site and Bost Building, Homestead, PA.; and Sloss Furnace, Birmingham, AL.

This effort is already bearing results. In the past several months information generated by the *Labor History Theme Study* has been used to comment on information on legislative proposals and acquisition of historical properties in the field of labor and social history. The most recent examples of this progress involved two labor history-related bills: the Bramwell National Historic Site bill and the Coal Heritage bill.

In accordance with the recent report by the Humanities Review Committee of the National Park Service to encourage scholarly research and peer review, the essays and National Historic Landmark nominations produced by the labor theme study will undergo a systematic and rigorous peer review by scholars within the academic and historic preservation communities. The Service, in cooperation with academic and professional organizations, will produce a study that illustrates new holistic methodologies to improve the management and implementation of history research performed by the Service.

Through the implementation of the *Labor History Theme Study*, the National Park Service affirms its commitment to creating viable partnerships with workers, labor unions, leaders from state and local communities, and preservation and academic history organizations. Working with our partners, we intend to develop strategies to assist communities with the preservation and interpretation of their locally-based but nationally-significant labor history sites and resources. The challenges are great, but rewards resulting from the recognition of the labor history heritage sites in the United States are worth the effort. In the process of completing the *Labor History Theme Study* the National Park Service can lead the way and validate our mandate to do more with less. We will produce a better product, based on scholarly research and subject to the most rigorous peer review. In cooperation with a variety of partners, the Service can become a leader in the fields of education, research, interpretation, and historic preservation relating to the labor history of our country.

Dr. Harry A. Butowsky is a historian in the History Division of the National Park Service.

Agent of Change
The Matewan Story

Michael Creasey

As early as the 1870s, promoters began boosting the natural resources of land throughout southern West Virginia. Millions of acres of land, timber, and mineral rights passed out of the hands of local people and into the grasp of speculators who in turn sold them to absentee corporations.

Agent of Change[1]

The coming of the railroads was nearly as dramatic a development as the transfer of land to private corporations. In a relatively short period of time railroads financed by Wall Street and Fleet Street laid down an intricate web of tracks opening the way to exploitation of the natural resources.

In 1886, the Norfolk and Western Railroad announced an east-west line through southern West Virginia. Timber companies succeeded in denuding the mountainsides, and the coal companies filled the landscape with gob piles and finished the process of transforming the countryside beyond the recognition of former mountain dwellers. The Williamson Coalfield, comprised of Mingo, and parts of McDowell and Wayne counties, was opened shortly after the completion of the N&W mainline along the Tug Fork. The first coal mining operations were located around Matewan. By 1900, Mercer, McDowell, and Mingo counties alone produced almost as much coal as the rest of the entire state had in 1890. Over the next 20 years coal production in the southern counties continued to expand.

Too Many Mines and Too Many Miners [2]

The West Virginia coal fields were brought into production at a time when the established northern fields already were adequately supplying the national demand. Thus, from the outset, southern West Virginia producers were faced with stiff competition from the established coalfields. Consequently, in order to compete in distant markets, West Virginia producers had to keep their production costs well below those prevailing in the northern fields. By holding back wages, West Virginia operators were able to maintain their competitive edge.

*(**Creasey**—continued on page 14)*

The Matewan area, located on the Tug Fork of the Big Sandy River in Mingo County, WV, is referred to as "a peaceful place with a violent history." Its topography consisting of sharply rising mountains rearing up from twisting creeks and narrow valleys existed for generations as a region apart from the industrialized east coast, isolated physically and culturally by the impenetrable terrain. The Tug Valley remained largely unchanged until the Industrial Revolution demanded coal to fuel the nation's industries. The influx of outsiders and exploitation of the resources dramatically changed the physical and socioeconomic makeup of the region. Today, these regions of Appalachia have been described as, "rich yet poor, exploited yet underdeveloped, scarred yet beautiful." [1]

Matewan has nurtured a distinctive folklore and has intrigued visitors over the past century. In the 1880s, the feud between the Hatfields and McCoys raged near Matewan. Forty years later, the town was the scene of the "Matewan Massacre," a bloody conflict in the West Virginia Coal Mine Wars. Historical events, the rugged terrain, and its people have shaped the unique contemporary character of the Matewan area.

In 1991, the National Park Service and the Matewan community developed a community-based plan that sets forth an agenda for accomplishing specific goals and a means to stimulate wider recognition and appreciation of Matewan's heritage. The plan, *Matewan: A Time of Change*, laid out a series of interconnected public and private actions where wisely placed public investment would, in turn, spark private sector development. The Matewan Development Center itself is a success story—a town of 800 people has worked to gain commitments from the Matewan National Bank and three coal companies to support the Center and a full-time director. Other partnerships that have formed include grants from the Humanities Foundation of West Virginia and various foundations to publish interpretive materials, collect and transcribe oral histories, architectural studies of buildings and sites related to the Matewan Massacre, a grant from the West Virginia Housing Development Fund and the Claude Worthington Benedum Foundation to restore the G.W. Hatfield Building for Section 8 low-income housing units and small businesses, a grant from the state for facade restorations within the historic district, a federal appropriation through the National Park Service to develop an interpretive plan for Matewan, a community restoration and development plan (in conjunction with Virginia Polytechnic Institute), work with the Army Corps of Engineers and communities along the Tug Fork to develop a greenways plan in concert with the Corps floodwall project, and document sites and resources associated with the Hatfield and McCoy Feud sites and the Matewan Massacre.

The accompanying article represents a continuing effort by the NPS to tell the story of the history of the American worker in its full diversity. This is a history of the common man, his labor, his life and culture. While entrepreneurs and industrialists provided the ideas and capital that fueled the American Industrial Revolution, it was American workers of different races and of many nationalities and religions, coming together, that created the modern industrial state. Both the Blair Mountain site and the town of Matewan are now under study for possible designation as National Historic Landmarks within the context of the *Labor History Theme Study*.

Specific questions concerning suggested sites for study within the context of the *Labor History Theme Study* should be addressed to Dr. James R. Grossman, The Newberry Library, 60 West Walton Street, Chicago, IL 60610-3380.

—HAB

[1] Lewis, Ron L., Excerpts from *Matewan: A Time of Change*, National Park Service, Mid-Atlantic Region, Philadelphia, PA, 1990.

(*Creasey—continued from page 13*)

After the northern fields were organized by the United Mine Workers of America (UMWA) in 1902, the northern operators were forced to pay union scale or face a strike. Thus, West Virginia operators strove diligently to keep the UMWA out of its mines in order to insure a lower wage structure. This, above all else, is what the coal operators strove to do in the 1900 to 1930 period. This strategy enabled West Virginia operators to steal the markets of northern, union producers during strikes.

The UMWA, with its base of strength in the coal fields of northern West Virginia, Pennsylvania, and Colorado, realized that it was threatened with extinction if the non-union mines of southern West Virginia continued to out-produce and dominate the coal markets. Therefore, the UMWA concentrated on organizing southern West Virginia. It is no surprise, then, that West Virginia became the battlefield in the 1910s and 1920s. Throughout the "Mine Wars," the bastion of non-union strength was in Logan, McDowell, Mingo and Mercer counties, which remained unorganized until 1933 when the passage of the National Recovery Act enabled unionization.

The UMWA's role in southern West Virginia is one of the most memorable chapters in the development of industrial unionism in the nation. It included colorful figures including a martyred folk hero, Sid Hatfield, and Mary Harris "Mother" Jones, John L. Lewis, William Blizzard, Fred Mooney, Frank Keeney, and Van Bittner. There were dramatic confrontations, such as the Paint Creek-Cabin Creek strike in 1912-13, the aborted Armed March of 1919, the Battle of Tug Fork and the Matewan Massacre in 1920, and the Battle of Blair Mountain in 1921.

West Virginia Coal Mine Wars [3]

John L. Lewis, the bushy-browed new president of the United Mine Workers of America came to Bluefield, WV on January 30, 1920, to announce the union would launch a campaign to organize coal miners in the southern Appalachians. Lewis knew coal operators would resist to the bitter end, but that didn't matter. The miners wanted to organize; the UMWA had to have their memberships; "now is the logical time for this to work and the campaign will be pushed through to a finish."

The drive had begun. It quickly grew. The organizing campaign quickly became bitter. The coal operators resisted as strongly as expected; when a miner joined the union, he was immediately fired from his job. If he lived in a company-owned home—as most did— he was told to move out. If he didn't move out, gun-bearing Baldwin-Felts "detectives" evicted him and his family, setting his furniture out on the road. Despite that kind of opposition, miners by the hundreds along the Tug Fork River joined the union. By May 15, 1920, 3,000 Tug Fork miners had joined.

Nowhere was union activity greater that spring than in Matewan. There, the police chief, Sid Hatfield, a former miner, and Mayor C. C. Testerman openly cooperated with the drive and protected the miners as they held organizing meetings in the town.

Despite efforts by Hatfield to keep the Baldwin-Felts detectives away from Matewan, they came anyway and continued the evictions. Then, on May 19, 1920, 13 Baldwin-Felts detectives—headed by Al and Lee Felts, two of the three brothers who managed the agency—came to Matewan to evict miners and their families from their homes in the Stone Mountain Mine camp.

Nothing angered miners more than "thugs" forcing women and little children from their homes at gunpoint. Word of the evictions spread like wildfire. Angry miners from Matewan and the surrounding area grabbed guns and rushed to the town as the detectives evicted six more families in dismal rainy weather. Hatfield led a group of miners to the Stone Mountain camp and tried to stop the evictions, but the Felts brothers refused his plea. When the detectives returned to Matewan that afternoon, having finished their jobs, Hatfield, surrounded by armed miners, tried to arrest Al Felts for conducting the evictions without proper Matewan authority. As he and Mayor Testerman glared at Al Felts and the other detectives outside the railroad depot, someone fired a shot, and the battle was on.

It lasted about a minute, but hundreds of shots were fired. Al Felts and Testerman fell in the first volley. When it was over, seven detectives, including both Al and Lee Felts, Mayor Testerman and two miners were dead or dying.

The battle made Sid Hatfield a folk hero for miners throughout the nation. Fifteen months later, the Baldwin-Felts detectives retaliated by killing Sid Hatfield on the courthouse steps at Welch, in a murder so brutal that it touched off an armed rebellion of 10,000 West Virginia coal miners in the largest insurrection this country has had since the Civil War.

Matewan is now being considered for designation as a National Historic Landmark by the *Labor History National Historic Landmark Theme Study.* Through the preservation of Matewan and the interpretation of this story to the American people, the National Park Service, in cooperation with the Newberry Library and the many interested citizen groups of Matewan, will insure that Matewan will continue to teach the American people about the important issues and events that working men and women have faced throughout our history.

Notes

1 Matewan Task Force and the National Park Service, *Matewan: A Time of Change.* NPS Mid-Atlantic Region, Philadelphia, PA, 1990.

2 Workman, Michael E., excerpts from *A Coal Mining Heritage Study: Southern West Virginia,* NPS Mid-Atlantic Region, Philadelphia, PA, 1991.

3 Savage, Lon K., excerpts from *Matewan: A Time of Change,* National Park Service, Mid-Atlantic Region, Philadelphia, PA, 1990.

Michael Creasey worked in the NPS Mid-Atlantic Region as a planner in the Branch of Park Planning and Special Studies. He has worked extensively with Appalachian communities and governments, primarily in West Virginia and Kentucky. He recently joined the Rivers, Trails and Conservation Assistance Program in the NPS Southwest Region in Santa Fe, NM.

Lost Heritage

WWII Battlegrounds in the Pacific

J. Steven Moore

As the 50th anniversary of numerous World War II events draws to a close within a year, *CRM* will be addressing a number of issues that confront managers of 20th-century war resources—issues such as land use planning, preservation, interpretation, and protection. In the following article, Steve Moore reflects on the preservation needs of World War II battle sites in the Pacific. In our next (December) issue, NPS planners Mary Franza and Ron Johnson analyze how differently and qualitatively various European nations have memorialized the 20th century wars, in their article entitled "The European Memory of 20th Century Wars." We welcome contributions of articles for this series. Please send manuscripts or topic ideas to the editor.

Guadalcanal. Tarawa. Saipan. Peleliu. Iwo Jima. To many people, these names have little or no meaning. But for other Americans, they speak of courage, heroism, and sacrifice. Fifty years ago, these islands and many others like them in the Pacific became battlegrounds, witnessing some of the most brutal fighting of World War II. Today, while most though not all of the wreckage of war has disappeared from their beaches and jungles, their significance to American history has not. They are hallowed by patriots' blood no less than Lexington, the Alamo, or Gettysburg.

That fact alone has not been enough to ensure their preservation. In fact, due to a variety of circumstances, virtually no effort has been made to preserve any of these battlefields or others like them in the Pacific as integral historical parks. Guam's War in the Pacific National Historical Park preserves tiny and incongruous parcels of that island, but to do the three-week-long campaign there justice would almost require setting aside half the 30-mile-long island—a physically unfeasible and politically impossible task. Outside Guam, only four other areas that witnessed fighting during World War II are under U.S. administration—Pearl Harbor, Wake Island, the Northern Mariana Islands, and the Aleutian Islands in Alaska. Pearl Harbor remains the headquarters for the U.S. Pacific Fleet and does attract 1-1/2 million visitors each year to the U.S.S. Arizona Memorial, and many Japanese tourists visit Saipan with its American Memorial Park in the Northern Mariana Islands. The other two areas are too remote and barren for almost anyone to bother even going there.

These are the exceptions. Most of the areas where American soldiers fought during World War II lie on foreign soil. For Pacific islanders—Micronesians and Melanesians—whose only role in the war was the involuntary use of their homes as battlegrounds, there is little interest in spending time and money preserving something that holds scant significance for them. After the war ended and the foreign soldiers left, they remained to clear away the debris, rebuild shattered homes, and get on with their lives. Tourism which could be used to justify setting aside some of these sites is not well developed in many Pacific island nations—distance being the most daunting factor to travelers—and would not, therefore, provide sufficient incentive, i.e., money, to preserve the sites. Those war relics that do remain—concrete bunkers, coastal guns, and abandoned landing craft—tend to be too large and heavy to be easily moveable or else are in marginal land-use areas where no one cares about them in the first place. Deliberate preservation in such instances is more the exception than the norm.

There is no shortage of islands that could qualify for historic preservation status in the Pacific. American forces conducted more than 50 amphibious operations during the war in the Pacific theater alone. Obviously, it would be impossible to tour the scene of all of these actions, at least all at once. When planning my own trip, I faced time and budget constraints and had to be selec-

(**Moore**—*continued on page 16*)

Some of the more than 1,000 U.S. Marines killed during the Battle of Tarawa, November 20-23, 1943.

Remains of American landing craft, foreground; and tank, Tarawa Atoll, 1993.

(Moore—continued from page 15)

tive. My itinerary came to include four major World War II battle sites— Pearl Harbor, Tarawa, Guam, and the Philippines. I abandoned plans to see Iwo Jima when told no regular flights serviced the island.

As the most accessible site from the U.S. mainland and as the location where the war began, Pearl Harbor was the logical starting point for my tour. Located on the south side of the island of Oahu, immediately west of the state capital, Honolulu, Pearl Harbor was first striking for its size. Perhaps because the name of the place stirs such large images, I expected something bigger, but compared to many other harbors in the United States, it is relatively small and contained. Nevertheless, approximately 90 vessels ranging from battleships to submarines were anchored there on December 7, 1941 . The attack left 18 of these sunk or badly damaged. Except for the battleships *Arizona, Oklahoma,* and *Utah,* all would be repaired and returned to service. A greater loss was suffered by the 2,403 soldiers, sailors, marines, and civilians killed and the more than 1,000 wounded, a considerable number under any circumstances, but especially considering the air raid lasted not quite two hours.

Pearl's blue water still affords shelter to gray naval vessels 50 years later, but now the most notable attraction is the white, curved profile of the U.S.S. Arizona Memorial. Dedicated in 1962, the Arizona Memorial straddles, but does not touch any part of the battleship whose forward powder magazine exploded a few minutes into the attack killing more than 1,000 members of her crew. Initial plans called for the removal of all the bodies on board, but following the deaths of two Navy divers who went below to remove them, it was decided to let them be. The forecastle of the ship was later removed, leaving only the hull which entombed the crew. Arizona remains where it sunk at its berth.

On the opposite side of Ford Island lies another less-famous victim of the attack, the U.S.S. *Utah.* It capsized after receiving two torpedo hits, trapping more than 50 men below decks. Still partially exposed above the surface, *Utah* is more visible than *Arizona,* but it is not possible to see the former when visiting the memorial. Instead, one must take a boat tour from Honolulu. Lasting about three hours, such narrated trips offer greater details on the attack and provide an opportunity to see other areas of the harbor and its surroundings not normally visible such as Hickam Field, the abandoned Naval Air Station on Ford Island, and Hospital Point where the U.S.S. *Nevada*—the only battleship to get underway during the attack—ran aground to avoid being sunk and blocking the entrance of the harbor. A memorial pier stands adjacent to *Utah* where every day an American flag is raised in memory of her crew.

The air raid on Pearl Harbor coincided with other attacks in the Pacific, including among them the American possessions of Wake Island, Guam, and the Philippines, all of which were captured and occupied by the Japanese. U.S. strategy for recovering this territory and defeating Japan involved a two-prong thrust through both the central and southwest Pacific. Beginning in New Guinea and the Solomon Islands, U.S. and Australian forces under General Douglas MacArthur first checked the Japanese advance and then began to push it back toward the Philippines. North of the equator in the central Pacific the Americans drove through the Gilbert, Marshall, Caroline, and Mariana island chains, bypassing many Japanese strongholds in a strategy called leapfrogging and leaving their isolated defenders to starve.

To be sure, not all the islands could be conveniently bypassed. Some had to be taken. One of these lay 2,500 miles southwest of Hawaii in the Gilbert Islands. Here on a little spit of sand and coral no longer than the distance between the U.S. Capitol and the Lincoln Memorial would be fought one of the fiercest battles in the Pacific. It's name: Tarawa.

The Japanese occupied the Gilbert Islands in 1942 and began building air bases, threatening the Allied supply line to Australia and the southwest Pacific. To defend against amphibious assault, the Japanese built concrete bunkers and gun emplacements across the entire length of the island. Tarawa was so strongly fortified that the Japanese commander, Rear Admiral Keijo Shibasaki, boasted a million men could not capture it in 100 years. He had cause to feel confident, but his prediction fell short. It took fewer than 20,000 Marines three days to secure the island, but they paid a high price. More than 1,000 Americans died and another 2,000 suffered wounds. Japanese losses were even greater. Of the

One of the many Japanese bunkers that guarded Tarawa Atoll, seen after the battle, November 20-23, 1943.

Destroyed Japanese bunker, Tarawa Atoll, 1993.

General Douglas MacArthur and staff visit the Malinta Tunnel, Corregidor Island, after its recapture, February 1945.

The Malinta Tunnel, 1993.

approximately 4,500 Japanese soldiers on the island at the start of the battle, only 17 surrendered. Seventeen!

Much has changed on Tarawa since, and while it bears little resemblance to the fortress the Marines encountered, it retains some interesting relics of the battle. Tarawa has three large 8" coastal guns, captured from the British at Singapore. Located on the ocean side of the island, two still point toward the blue horizon in the direction the Japanese expected the Americans to attack. The third faces toward the lagoon in the direction they did attack. On the landing beaches, one may see the corroded hulls and treads of several shot up and abandoned landing craft and amphibious tractors used to transport troops as well as a tank lying half-buried in the sand a short distance from shore. Also along the beach are concrete obstacles intended to divert the Americans and their craft into prearranged firing zones. Concrete bunkers stand along other sections of beach, eternal sentinels facing an empty, brilliant blue ocean horizon.

Among Tarawa's more interesting sites is the concrete bunker used as the command post of Rear Admiral Shibasaki and his staff. Standing two stories high with walls 2'-3' thick, it is now overgrown with plants and filled with trash from the local inhabitants. Here, Shibasaki met his end. Several large shell holes on its side facing the lagoon tell why. It is a harrowing image of war's brutality.

The only effort made to preserve any of this involves two of the 8" coastal guns, painted and shored up with sandbag-like concrete. The actual Battle of Tarawa occurred on only one of the 40-mile-long atoll's islets, a place named Betio (pronounced BAY-she-o), now the most populous settlement on the island. It is an indication, if any were needed, that what writes large for American or Japanese history matters little to the people living there today. Most Civil War and even Revolutionary War battlefields in this country more closely resemble their appearance of 130 or 200 years ago than Tarawa does today. Standing in the quiet shade of the island's coconut trees, it was difficult to imagine the utter devastation evident in wartime photos showing Marines crouching as they dashed across a blasted landscape.

The Gilbert Islands where Tarawa is located became the staging area for the Americans' next objective: the Marshall Islands. I mention it now only briefly, because the flight to Guam landed at Kwajalein. Now a base for the U.S. Army, Kwajalein was captured in February 1944 after a week of intensive fighting that cost 373 American lives. That casualties remained comparatively low is testimony to the bitter lessons learned at Tarawa. Japanese losses on Kwajalein were no less, revealing the same stubborn willingness to fight to the last man. Only 35 men survived of the original force of 5,000. The scene of this ferocious combat is now virtually covered from one end of the island to the other by a concrete runway, flanked on either side by buildings and a narrow golf course.

Another 1,800 miles to the west in the Mariana Islands, Guam was captured by the Japanese in December 1941 with little opposition. It remained under their control for the next 32 months. American forces numbering 55,000 strong landed in July 1944 and liberated it after a three-week campaign that caused nearly 7,000 American casualties.

Unlike the other islands discussed in this article, Guam boasts a historical park to interpret this story as well as much of the rest of the Pacific war. The visitor center of War in the Pacific National Historical Park is located at Asan, one of two landing beaches used by the Americans in 1944. Guam has undergone many changes since then such as the construction of modern high-rise tourist hotels, but it remains possible to find relics of the past still hidden amidst these signs of progress. Concrete bunkers honeycomb rock outcroppings on the shoreline, their slit openings seeming to squint in the bright sunshine. Camouflaged to blend with the surroundings, some bunkers could almost be stepped on before one realized they were there. Artillery intended to blast landing craft from the water now overlooks beaches where sunbathers lay. Additionally, the national park encompasses parts of the invasion beaches as well as inland units containing Japanese coastal guns. Landing craft sunk during the invasion lie just off shore and may be explored by scuba divers. Live and spent rounds of ammunition may still be kicked up on the beaches.

More than Guam or any other island discussed in this article, the Philippines offered the best preserved historic

(Moore—continued on page 18)

(*Moore—continued from page 17*)

sites, sometimes by circumstance, other times by design. The capital, Manila, was the scene of heavy fighting during its liberation in February 1945, rivaling in its intensity any in World War II. Large sections of Manila were laid waste and some of the worst atrocities of the war occurred when Japanese troops enraged by the apparent loyalty of the Filipinos to the Americans massacred approximately 100,000 civilians. Among allied capitals, only Warsaw suffered worse devastation.

Modern Manila rose from the ashes, erasing signs of the war, but for some few important landmarks. The Intramurous, a 16th-century Spanish fort, witnessed some of the bloodiest fighting. Japanese soldiers made their final stand in the city behind its thick stone walls and had to be blasted out at point-blank range. It suffered severe damage, now repaired, but it is still possible to appreciate some of the difficulties the Americans faced by walking along the fort's walls. Across the city's main boulevard from the Intramurous is the Manila Hotel, MacArthur's residence before the war. The MacArthur suite, a six-room penthouse overlooking Manila Bay, has been preserved in honor of the man who made the Philippines his home for six years before the war and is available for use by hotel guests. Also in the city is Santo Tomas University. Converted to a prison during the war, it held 3,700 American civilians stranded in the Philippines following Pearl Harbor. Still standing on the campus are two buildings that housed the American internees during their three years of captivity. A small plaque on the entrance commemorates their suffering.

The American Cemetery and Memorial, Manila, The Philippines, 1993.

Some of the men who died to set these and other people free now rest at the American Cemetery and Memorial. It is as impressive and moving as any national cemetery in this country. The memorial lists the names of 36,280 American and Filipino soldiers killed during the war whose bodies were never recovered and features 25 large colored mosaics, providing detailed descriptions of all the battles and campaigns in the Pacific. Surrounding the memorial are more than 17,000 graves, bearing silent testimony to the war's legacy.

Of all the sites I visited in the Pacific, Corregidor was the best preserved. The Philippines has preserved it as a historic site and actively promotes it as a tourist attraction. To that extent, the Filipinos are the exception to the rule that the Pacific war bears little significance to anyone other than the major combatants. This is due to their own direct participation in the fighting and to some degree to their lasting gratitude to the Americans.

On Corregidor, the Americans and Filipinos remained defiant for five months following Pearl Harbor, long after Japanese forces had swept victoriously through the rest of the South Pacific and Southeast Asia. Lying 30 miles from the city at the entrance of Manila Bay, the tiny tadpole-shaped island guarded the entrance into the harbor. First fortified by the Spanish, it was later strengthened by the Americans who added batteries of 12" mortars capable of lobbing 900-pound shells through the lightly-armored decks of ships trying to enter the harbor.

Visitors to Corregidor land at the North Dock, within sight of a crumbling concrete pier used by General Douglas MacArthur to board a PT boat in March 1942 prior to his escape to Australia. Guided tours take visitors around the island in trolleys that make frequent stops at several of the more important sites. Among the areas visited are a Japanese anti-aircraft battery, four of the nearly two dozen American batteries on the island some of which still show evidence of direct bomb hits, Topside Barracks and parade ground, and the Malinta Tunnel. A light and sound tour of the Malinta Tunnel details its history and the conditions endured by the defenders during the siege.

Although Corregidor's guns were intended for use against ships, they proved as effective against land targets as well. Following the American-Filipino retreat into the Bataan Peninsula, Corregidor's defenders aimed their artillery northward and lobbed huge explosive shells into the Japanese positions. Located just across the entrance to Manila Bay, Bataan's mountainous profile looms forebodingly over Corregidor.

In contrast to the highly-popular tours on Corregidor, Bataan is an unlikely destination for most travelers, even Filipinos. My guide said that he had not been there in some years—a confession illustrated when we became lost at one point. Despite its proximity to Manila, Bataan remains rural and isolated. It took three hours to reach by car, a result of poor roads and heavy traffic that can make American traffic jams pale by comparison. Lacking much development, Bataan has a tranquil, if dusty appearance. With the din of war having long since receded from the slopes of its volcanoes, little activity of any kind occurs to disturb the stillness of its drowsy heat.

Bataan's name is synonymous not only with the stubborn, futile defense of the peninsula, but also with the infamous Death March that immediately followed its surrender. Some 70,000 American and Filipino soldiers made the trek, covering about 60 miles by foot and another 30 by train, to their prison at Camp O'Donnell. They endured the intense heat of the dry season without adequate food, water, or rest. Of those that started out, between 7,000 and 10,000 never made it.

Today, the route of the Death March can still be retraced. In the towns of both Mariveles, at Bataan's southern tip, and Bagac, located along its western coast, zero-kilometer markers designate the beginning of the ordeal and other mileposts along the way mark the route.

General Douglas MacArthur fulfills his promise to return to The Philippines, October 1944.

A memorial on Leyte Island commemorates MacArthur's return, 1993.

The only official memorial to the defenders of Bataan is located at Mt. Samat, near the center of the second American-Filipino defense line. A large cross, 311' high, dominates the height. An elevator permits a view from the top when it is working.

My final excursion outside Manila took me to the island of Leyte. It was here that the first American landings in the Philippines occurred. Two-and-a-half years after the American flag had last flown in the Philippines, soldiers of the Army's 96th Infantry Division raised it for the first time on Hill 120. Less than an hour had elapsed since the first troops of a force comprising 165,000 soldiers splashed ashore on the island's black sand beaches. As I climbed the steep stairs that permit access to the top of Hill 120 today, sweat drenched my clothing and I wondered how anyone could make the ascent under fire. A tacky-looking memorial, consisting of a van-size replica of an Army helmet, reminiscent of something one might see at a miniature golf course, marked the crest. This did not detract from the view I enjoyed which revealed an unbroken emerald green canopy of coconut trees in all directions.

Besides being the first Philippine soil liberated by the Americans, Leyte became notable for another reason. It provided one of the most memorable photos taken during the war. About four hours after the first landings, MacArthur literally fulfilled his promise to return to the Philippines when he too waded ashore. The photograph shows MacArthur striding confidently through the surf toward the beach with his retinue of aids in tow. What is now forgotten is that had MacArthur had his way, he would never have gotten his trouser cuffs damp. Plans were for him to land at a dock, most of which had been destroyed during the pre-invasion bombardment. Some few remained, but no one had time to show MacArthur's party where they were. Still 50 yards off shore, MacArthur's landing craft ran aground. Impatient and annoyed with the delay, MacArthur ordered the vessel's ramp lowered, stepped knee deep into the water, and strode toward the beach. The photograph of the incident created the impression in many peoples' minds of a resolute, forceful commander, which MacArthur certainly was. Nevertheless, his fierce expression at that particular moment owed more to his irritation than to anything else. When MacArthur saw the picture, he realized its public relations value and repeated the performance at another beach the following day.

While it might be said about others, the Filipinos have not forgotten the whole episode. Today, a somewhat weathered, but still effective memorial stands near the spot of the first landing. It shows the confident if stiff figure of MacArthur surrounded by Philippine President Osmena and military aides standing shin-deep in a pool of water. It captures the spirit, if not the drama of the event.

About five miles to the north, Leyte's capital city, Tacloban, became MacArthur's headquarters during the ensuing battle for Leyte. The Price House where he stayed has been preserved as a memorial. Throughout the Leyte campaign, Tacloban experienced frequent air raids, with Japanese pilots—who knew MacArthur's location—showing a marked determination to try to kill him. Though they managed to strafe the Price House, and killed several people living on either side of it, they succeeded in doing nothing more than knocking the plaster off some of the walls in the headquarters building itself. Damage to a wall in the house may still be seen.

The setting for this history is a lush tropical paradise. Leyte retains its beaches, unsullied by crowds or high-rise hotels. Coconut trees grow right to the shoreline providing cool shade from the equatorial sun. It is pure isolation. In this peaceful setting, it is hard to image the quiet disturbed by the din of war, that here as on hundreds of similar beaches and jungles across the Pacific men fought and died. Nature has healed the wounds with time filling in the craters and washing away the blood and debris. What remains are a few markers and monuments, the shattered remains of concrete bunkers, the veterans, dwindling in numbers with each passing year, and the memories.

J. Steven Moore is a park ranger on the National Mall, National Capital Parks-Central in Washington, DC. His article was the outgrowth of a 3-1/2 week vacation to the Pacific for the sole purpose of exploring World War II battlegrounds.

Historic photos courtesy the National Archives.
Contemporary photos by the author.

The Incorporation of Digital Images into an NPS Photo Archive System

Walter Wait

One of the primary problems with NPS photograph collections is that we have so many of them. The proliferation of photographic resources has caused an information "gridlock"—no one appears to know what we have, where to look, or how to handle the ever-increasing load of images. In an attempt to address these problems, the Southwest Regional Office Division of Anthropology has created a digital image archive. Using Kodak CD technology we hope to change photographic archive liabilities into usable resource management and interpretive media assets.

The Problem With Photographs

Because of the proliferation of photographers and the National Park Service's increasing desire to collect photographic evidence, the Service has lost control over both the process and the management of the images it creates. The official photographer has generally ceased to exist. The "new" photographer appears to have neither the time nor the professional inclination to keep institutional photographic records. Because of this, there is a tremendous backlog of undocumented or poorly documented project generated images in the parks and regional offices. Undocumented photographs, negatives, and slides are images that have been either disassociated from their descriptive photo-logs, or have never been documented or linked to documentation.

The Undocumented Image and the "Secondary User"

Images by their very nature are difficult to describe. In many cases, the primary subject of a photograph may become secondary in importance to a researcher who values the image differently than the photographer. A researcher interested in fire management, for example, will look at a photograph of a back country archeological site with a very different perspective. Unfortunately, our hypothetical fire management researcher rarely, if ever, gets to see archeological research images. There are three reasons for this. First, a "secondary user" rarely knows of the existence of a set of images that were taken by someone in a different discipline or at a different time. There is rarely any attempt to collect copies of images or image documentation into organized finding aids that transcend the originator's specific project. Second, many newly created park and regional images remain undocumented. Third, since photographs are scattered, it is difficult for a secondary researcher to find a specific image, even when it is known to exist.

The Secondary Life of a Photograph

Once the primary use of a photograph collection is over, informal "borrowing" often occurs. The "best" photographs disappear into a publication folder, the "best" slides wind up in an interpretive slide show, a researcher borrows the images useful to a new project—and the images somehow wind up in the new project documentation. Synthetic collections are created from a variety of project generated image files. Without control, these borrowings frequently occur.

Images contain an extraordinary amount of information. That is why they are so commonly reused. Reuse, even within the life of a project, will often cloud the provenance of a set of images. The constant reshuffling, sorting, and selection of grouped photographic collections invariably lead to the loss of provenance unless careful documentation, curation, and management is maintained.

It is important to emphasize that it is difficult for the borrower to determine the rarity of a given image. Negatives may have been lost, for example, and the print may be the only surviving record of an event, place, or time. Rarity in a photograph is a relative term. For example,"rarity" might very well be a product of a specific image's level of documentation. " While it is true that almost all early photographs can be considered "rare"—images taken recently of subjects that can no longer be photographed are equally rare, and worthy of more than casual control.

The Management of Image Assets

In 1992 the Southwest Region's Division of Anthropology identified a need to create an Image Archive after analyzing the condition of cultural resource project documentation within the regional office. It was discovered that photographic resources were scattered, undocumented, and generally unavailable for secondary use. It was felt that formal, regional management of images that documented cultural and natural resource projects insured that the images would be preserved as valuable resources for the future.

The creation of a formal archive of photographic images insured that photographic images were linked to their photo-logs, were ordered and tracked as project documents, and were controlled in terms of reuse. In cooperation with the Division of Curation, the Division of Anthropology has accessioned and brought under control over 50,000 cultural resource project images in the past three years.

Ordering and accessioning these images into an image archive, however, has presented the division with a secondary problem. Once the ties to specific projects and project documentation were reestablished, the images fell into the category of "project documents." It was found that many of the images rightfully were linked with collections that were accessioned by the Division of Curation. Most collections and their associated documents are managed off-site at conservation

*(**Wait**—continued on page 23)*

Digitization and Archival Information

Diane Vogt-O'Connor

Every decade or so a new technology appears on the information horizon that is heralded as the replacement for all audiovisual and textual documents. In the 1950s it was microfilm. In the 1970s it was videotape. In the 1980s it was videodiscs; while in the 1990s it is CD-ROMs and digitization that will lead to paperless offices and archives and bookless libraries. Archives and libraries will vanish in favor of home information centers! Access to all information will be instantaneous! Archives, libraries, and museums can throw out their originals!

Humans are naturally resistant to new technologies. Being tactile creatures we like information sources we can touch, manipulate, stroke, and hold in our hands. We like to be able to sit in our easy chairs and browse conveniently packaged information while we eat or drink. We read in the bathtub. We like a profoundly personal relationship with our information sources. IBM recognized this fact when they called their microcomputers "personal computers."

Our resistance to technology is enhanced when it becomes clear that new technologies are rarely good for the purposes for which they are planned and sold. When the personal computer was first marketed we were told that it would balance our checkbooks and tell us what to make for dinner and how (i.e., provide recipes) based upon the contents of our refrigerators. What we actually use our personal computers for is, by and large, wordprocessing.

Digitization and Museum Archives

CD-ROM and digitization are new technologies that have yet to prove what they can do most effectively. (Note: CD-ROM means compact disk read-only memory. Read-only refers to the fact that the data on the disk may not be changed by the reader.) We are told that CD-ROMs and digitization are the solution to all of mankind's informational woes. Caution is advised. So far, their most effective products have been games and portable libraries, not access to original documentary sources. This may change if most archives, libraries and personal computer users can be convinced to invest in CD-ROM drives. On the other hand, another new technology may pop up momentarily that is incompatible with CD-ROMs. Museums and archives are generally impoverished organizations that can not afford to invest in transitory systems.

Currently, the actual market for archival documentation on CD-ROM is fairly small and relatively few archives or libraries are producing CD-ROMs. To be effective, CD-ROMs must be operated with a database package to provide searchability. Since most collections in archives and libraries, particularly photographs, are not consistently labeled, or identified it is very labor intensive to build effective databases for them. Such database building involves research, data verification, name and term standardization, input, and editing. Without this work, the major advantage of CD-ROMs, easy searchability, is lost. Some of these problems can be solved for textual data, by the use of full-text searching, but not all.

New Technology Poses New Problems

Most new technologies lose more than they gain in the process of duplicating archival and manuscript materials. Microfilm drove researchers crazy due to the awkward reader/printer access systems, poor indexing, and poor quality control (frequent illegibility). Videodiscs were expensive, required special equipment to play, impossible to update, and often had mediocre image quality. CD-ROMs are short-lived and require special equipment to play.

Perhaps most worrisome, digital data requires a high original data capture investment; an endless continuing investment in data migration to each new generation of hardware and software; and a need for data verification and certification after each transfer. Once digitized, data is more vulnerable to destruction. Digital data is short-lived in most of its forms. Diskettes are fragile. Computer tape and videotape last between 10 and 20 years if played and checked annually. While CD-ROM recording media may last 100 years, the disks themselves delaminate after between 10 and 15 years (depending upon which conservator or research scientist is speaking), leaving users with a useless pile of plastic.

Digitization: Legal Problems

Beyond these issues, digital data, particularly CD-ROMs, frequently run aground on the shoals of copyright and privacy legislation. Archives, museums, and libraries frequently do not have the copyright to the images and manuscripts within their collections. Instead, the copyright belongs to the creator (author or photographer). Reproducing these manuscripts or images on CD-ROM or the Internet is publication and thus a violation of copyright.

Privacy legislation is even more complex. Living individuals have a right to privacy. Publishing their face or words without permission is illegal. Therefore, placing the oral histories, transcripts, or images of private living individuals on a CD-ROM, the Internet, or other distributed digital source is illegal without prior written permission from the individual illustrated or quoted. Significant portions of most park audiovisual collections show unnamed individuals, just as many park collections of original audiotapes, motion pictures, photographs, and videotapes lack release forms.

Digitization and Original Documentation: What is Lost

Finally and perhaps most conclusively, digital data only captures a portion of the functional values of

*(**O'Connor**—continued on page 22)*

(O'Connor—continued from page 21)

archival documents such as diaries, letters, photographs, and videotapes. These values include the following:

- artifactual value (value as a piece of material culture in a particular process and/or format and by a particular creator);
- associational value (value due to being owned, created, used, or evaluated by a particular individual or group);
- evidential value (legal value as unmanipulated evidence of an activity, event, function, or entity such as the answer to the classic question, "what did he know and when did he know it?");
- administrative value (as a record of the functions, policies, procedures, financial, and legal status of an organization); and informational value (recording the who, what, where, why, and when that journalists crave including names, dates, individual's opinions, activities, events, processes, and memberships.)

None of the new technologies can reproduce these values effectively. Consider CD-ROMs attempting to reproduce photographs. Photographic historians, scientists, and students of material culture are interested in the artifactual value of photographs. Knowing a photograph's process (e.g., cellulose nitrate negative or gum bichromate print) and format (cabinet card or mammoth plate) provides valuable information that helps researchers date, attribute, and determine what information could be recorded by the camera. Knowing the process also tells us how the information will degrade over time.

In the NPS, less than 1% of the existing photographs are labeled with this information. This photographic process/format information can only be obtained by examining the original image's tonality, paper fibers, deterioration, and the actual layer structure of the emulsion, binder, and base configuration. Scholars working with CD-ROMs will not be able to tell what process the image is, thus losing valuable information.

Digitized images are very easily manipulatable; thus, they are highly suspect as evidence. Photography, whether justly or not, has had a reputation for veracity. This reputation has led to photographs being used as evidence in legal cases, publications, and exhibits. As Lewis Hine noted, "Photographs don't lie, but liars photograph." Due to this reputation, photographs have been used to prove the existence of the non-existent from 19th-century photographs of pixies and ghosts to 20th-century images of the Loch Ness monster. When the new technology of digitization tries these tricks, however, it leads to an uproar. When *National Geographic* magazine chose to digitally rearrange the Egyptian pyramids in a cover image, the bad publicity was phenomenal. Digital images do not enjoy the same reputation for veracity as photographs either in the popular press or the courts.

By their nature, digital images do not have associational value. Recently, the NPS turned down an offer from the Library of Congress to receive a facsimile of the *Gettysburg Address* instead of continuing a long-term loan to the park of the original. The original *Gettysburg Address* made Lincoln's response to the tragedy at Gettysburg more immediate and poignant for park visitors as the document was directly linked to the event, as well as being written in Lincoln's own hand. A photographic copy does not have the same effect on visitors. Digital images are similarly mute where associational value is concerned. The hand of the master has vanished.

The forte of digitized documentation is information. Like xerox copies, digitized data can provide a significant portion of the surface information on an image or document. We can discover what is illustrated or discussed, although we will not be able to analyze the paper or process. In general, we also cannot examine the original signature or watermark unless the document takes up very large amounts of memory, thus becoming increasingly expensive.

If the materials are digitized intact, without cropping, in their original order, with care taken not to intermingle materials from different collections or sources, the resulting CD-ROM will provide significant assistance to scholars, particularly those who could not normally visit the archives or library. Thus, the CD-ROM has a democratizing effect, providing access to scholars without the money or inclination to travel or request copies. On textual documents, natural language full-text searching can mitigate the need for a database by providing limited accessibility to the more patient and innovative researchers who have a good dictionary of synonyms in hand.

A Cost/Benefit Analysis of Digitization

It is, however, essential to consider the cost. Conservators do not recommend digitization as the initial cost of digitization and CD-ROM production is not significantly less than that of producing copy photographic negatives, while lasting about 1/20 as long as a photographic negative. This cost does not factor in the cost of transferring the data as the software and hardware change and as the magnetic media degrades every decade or two. Unlike photographs, digital data requires functional hardware and software that must be kept in good order and upgraded as necessary—another cost.

The benefits we receive for this increased cost are three: 1) increased searchability—if the research and database work is completed correctly (another significant cost); 2) better, more democratic distribution of data—if the copyright and privacy situation allows us to actually publish the CD-ROM; and 3) the capability to manipulate images and text by correcting the contrast, removing stains, and enhancing image sharpness—if we have the time and inclination.

The hidden costs of digitization are three: 1) potential copyright and privacy lawsuits; 2) the endless cost of data migration and new hardware and software as developed; and 3) the potential loss of the original item when money that might be spent on caring for the original item is diverted to a glamorous new technology.

The digital copies, which contain only a portion of the information found in the original document or photograph, are often produced as supposed replacements for the original. This is rarely done overtly. Instead, money that might have been spent on conserving the

originals or photographically or xerographically reproducing a larger portion of the information found in the originals is spent on digitization. This digitization is despite the fact that digital data is less durable, even when printed out in many cases. For example, printouts of digital data made in the dye sublimation process are so fragile and sensitive that they are proposed for use as pollution indicators. If not cared for, the original photograph or document deteriorates and we are left with a pale digital shadow that requires continual copying, verification, and migration to new software and hardware to keep usable. During times of rapid technological change, this is an excellent recipe for losing our informational heritage.

With recent improvements in material science abounding, this is of particular concern. As with rain forests, we are only now learning how to fully extract all the value from our original source materials. Who knows what new techniques we will have in the future for analyzing and studying our documentary heritage? If we allow the originals to self-destruct while funding digitization, we may destroy or lose an important portion of our heritage without ever realizing it.

Keeping the Baby without the Bathwater

What is the solution? It is advisable for archives and museums— the impoverished custodians of the nation's heritage—to take a conservative approach to dynamic technologies, particularly in the time of cutbacks. First, we must take care of our original documents and images. The real document is not replaceable just yet by a digital copy. Maybe someday, but not now.

Second, analyze collections and begin systematically to gather standardized data necessary for describing and later distributing audiovisual and textual collections via databases and digitization. Finally, consider using outside funds to start electronic projects, so that baseline funding is not diverted from the care of collections. While awaiting funds, spend some time investigating the park's copyright and privacy situation.

Aldous Huxley called history "A branch of speculation, connected (often rather arbitrarily and uneasily) with certain facts about the past." Caring for our original archival and manuscript collections will ensure that less speculation needs to take place over the past of our sites, our parks, and the NPS.

Diane Vogt-O'Connor is the Senior Archivist, National Park Service, Washington. She notes that she is very fond of the CD-ROM drives on her home and office computers, which she largely uses for reference purposes.

*(**Wait**—continued from page 20)*

centers like the Western Archeological Conservation Center (WACC). This posed a dilemma: how to maintain an image collection for secondary uses and to reunite the images with their respective collections. It was felt that the real challenge to the photo archivist was not only to conserve the image collections and their project relationships but to create usable resources for future interpretive and comparative work.

Turning Image Collections Into Image Assets

Once a project photograph collection has been properly accessioned, managed, and conserved, the archival rules for original order have been observed, and each image is associated with its respective project and descriptive documentation, two questions remain: where to store it and how to make the image available for secondary uses.

Part of the problem with the secondary use of these ordered photographic images is the need to re-sort, compare, and assemble images in ways that were not perceived when the image was first created. A second issue is the need to ensure the protection of the original image as a vital part of a project's documentation while maximizing the ability to reuse the image for secondary purposes.

The Southwest Region has initiated a program to create digital copies of its cultural and natural resource project images in order to resolve some of the issues that have been discussed above. It is the intent of the region to use these digital copies for most secondary uses—retiring the original images to project documentation repositories under the care of the Division of Curation or the National Archives.

There were six points that influenced the decision to create a synthetic digital image archive:

- The region did not wish to maintain an extensive photographic curatorial facility.
- Capturing a copy of the original slide or negative in a digital format was found to be substantially less expensive than making an interpositive or a duplicate slide.
- The digital image was easier to store and easier to find and retrieve for secondary usage than is the original.
- The existence of the digital image copy eliminated the need for ready accessibility to the original photograph and allowed the original to be curated at whatever facility is best suited to that task.
- The use of color film had become so widespread that it could no longer be neglected as "non archival." It was showing up in most collections that require archiving. This was especially true for slide collections associated with archeological projects.
- Creating multimedia assets from the photographic originals permitted the region to make far better use of its existing image collections.

It is clear that maintaining extensive photographic collections requires professional curatorial facilities and skills. Retarding the deterioration of some films requires carefully controlled conditions. Evaluation of and restoration of poorly conserved collections is the work of specialists. The region has only limited resources with

*(**Wait**—continued on page 24)*

(*Wait—continued from page 23*)

regard to photograph storage and conservation, and the long-term preservation needs of the collections are best served by a more central repository. Creating a digital copy of the original image is the least expensive and most practical method for making image collections available for secondary use while preserving the original image for the future.

In selecting a digital format, the region wished to fill three requirements. These were:

- Digital images had to be easy to create, store, and manipulate.
- Digital images had to be cost effective.
- Digital images had to be of a high enough quality to use in place of the original for most research, planning, publication, and interpretive uses.

The region selected the Eastman Kodak "Photo CD" system to create its digital image archive.

The scanned image is compressed into an "image pack" that contains all the information needed to reconstruct an image at any one of five pixel resolutions: 3072 x 2048, 1536 x 1024, 768 x 512, 384 x 256, and 192 x 128. The PCD disk media is especially designed by Kodak with a gold reflective layer and a scratch resistant plastic outer coating. Kodak claims that these disks resist oxidation far better than the standard aluminum based CD and they claim a CD life expectancy of up to 100 years. Each Kodak Photo CD can store up to 100 image packs. The CD is generally packaged in a plastic jewel case and a dye sublimation "contact sheet" with a thumbnail print of each image is enclosed. The print also bears the reference number of each image pack and the unique number and date of the CD itself. The CD number is also engraved on the CD. Copyright information can be included on the disk.

For a more in-depth description of the Kodak Photo CD process, readers are encouraged to read "A Photographic Memory for the Digital Age," by Lori Grunin; *PC Magazine*, 2/22/94.

Photo CDs can be accessed on almost any computer platform that will read a standard CD-ROM XA drive. Almost all graphics programs available today will directly access the Photo CD format. Once brought to the computer screen, the digital file can be manipulated at will and saved to any standard graphics file structure desired (i.e., TIFF, PCX, TGA, ETC.).

To create a Photo CD, you have merely to send your undeveloped film or slides to your local photo shop for processing. Since the digital images are all self-contained on the compact disk, there is no learning curve for users or for administrators. The CD is inserted into a CD player just like an audio CD, and the appropriate numbered image is viewed on either a computer screen or television set. This ease of production, storage, and use was one of the foremost reasons the Photo CD format was chosen.

Each image costs under $0.70 cents to produce from uncut roll film or $0.90 cents from cut film or slides. In contrast, it costs over $1.30 to reproduce a slide image photographically. Copying to Photo CD is, therefore, substantially cheaper than creating duplicate slides or negatives.

The 3072 x 2048 pixel resolution of the digital copy is more than adequate for most research, professional publication, and interpretive use. The digital image can be manipulated for size, contrast, and brightness, and color value in ways which could not be accomplished with the original photographic film and traditional darkroom techniques. The image can be cropped as desired, passed over a network, pasted into a WordPerfect document, and printed on a 600 DPI laser printer. It can be printed as an 8 x 10 glossy "Dye Sublimation" print—with all the qualities of a photograph, or it can be made into a poster or other temporary interpretive display.

WINDOWS-based Kodak "SHOEBOX" software permits boolian searches of an image database and displays a thumbnail picture of the desired images. As many as 4,000 thumbnails can be placed on a single Photo CD disk. About 750 of the 640 x 480 (screen-sized) images and their associated thumbnails can be placed on a Photo Portfolio CD.

Once the image has been copied to Photo CD it becomes an "asset" for multi-media interpretive uses. Digital images can be combined with voice and interactive branching to create television based interpretive and training exhibits and displays. There is an intriguing possibility of creating interactive CD titles for production by Cooperating Associations. Interactive CD-based Images can also be mixed with text to produce full color posters for temporary displays or for use in activity announcements or site bulletins. Regional Archeologists are using Photo CD images and Eos Systems "Photomoder" software to produce three dimensional measured drawings of archeological ruins. The Photo CD Images can be compressed and transmitted anywhere in the world, and can be presented on bulletin boards for professional discussion of their content.

The original photograph, meanwhile, stays in temperature controlled darkness, safe for future generations.

Dr. Walter Wait is the supervisory archeologist in the Division of Anthropology, Cultural Resource Center of the National Park Service, Santa Fe, NM.

New Publications Available

Two new books, *African American Historic Places* and the *National Register of Historic Places, 1966 to 1994*, are now available from the National Park Service's National Register of Historic Places and the National Trust for Historic Preservation.

For more information, please write to:

The Preservation Press
National Trust for Historic Preservation
1785 Massachusetts Avenue, N.W.
Washington, D.C. 20036

or call, toll free: (800) 766-6847

Using "Tourism" as a Context for Historical Archeology Sites

An Example from Yellowstone National Park

William J. Hunt, Jr.

Yellowstone National Park, with its unparalleled concentration of hydrothermal features and dramatic scenic vistas, is awe-inspiring. So much so that 19th-century visitors were led to nickname the park "Wonderland." The park's natural features spawn an almost visceral reaction in the visiting public leading many to view Yellowstone as a pristine wilderness virtually untouched by human artifice. Nevertheless, archeology has revealed evidence for a human occupation in the park for at least 9,000 years with a particularly intense cultural presence over the past 125 years. Yellowstone's historic past, however, is obscured by the natural and human forces operating continuously in the park, forces which have resulted in the plethora of archeological sites hidden behind an awesome scenery and a strong social bias toward denying the cultural forces operating in a "natural" national park. In short, there is some considerable debate as to the relative importance of cultural forces operating in Yellowstone National Park over time and particularly within the historic frame of reference.

McCartney's log cabin "hotel" at Mammoth Hot Springs, built in 1871. The 1872 bill creating Yellowstone National Park placed this site just a few miles inside the park boundary. Photo courtesy Haynes Foundation Collection, Montana Historical Society, Helena.

Historical archeology, as a result, has often proved controversial in Yellowstone National Park. Somewhat surprisingly and perhaps somewhat unwittingly, a major contributor to the unsettled character of the "natural versus cultural debate" has been the archeological community itself. Historical archeologists have generally been unable to identify and cogently explain the significance of Yellowstone's historic sites in terms that non-archeologists can appreciate. This is particularly true of the park's many garbage dumps, a type of site which is often visually displeasing but contains an incredible amount of information about the park's previous occupants. The purpose of this paper is to outline an approach for understanding and assessing the significance of historical archeology sites (including garbage dumps) created as a by-product of a park's operation—an approach which has proved to be of utility at Yellowstone National Park and one which could be as easily applied to other national, state, and local parks or tourist locales throughout the country.

Of course, assessment of significance is based upon recognition of an appropriate historic context within which a site's creation and function(s) can be interpreted. Until recently, historical archeologists have struggled to find an appropriate context to apply to Yellowstone's sites. The causes of this ineffectiveness are doubtless many and complex. Figuring prominently in the problem, however, is the relatively immense scale of the nearly state-sized study area (3,472 square miles) and an extremely diverse historical archeological record. The problem has been compounded by historical archeological projects which have typically been driven by construction or disaster and therefore necessarily of short duration and narrow in scope. As a result, Yellowstone has been subjected to a constantly changing field of investigators who have had little time to become familiar with the park and regional history.

With the advent of the Federal Lands Highway Program in the late 1980s, this situation may have turned around. The program's goal is to repair, upgrade, and reconstruct Yellowstone's 329 miles of damaged highways over the next 20 years. The planning process is incredibly complex, involving a host of federal, state, and local agencies. This bureaucratic complexity has spawned some concern among Yellowstone's cultural resource managers that unrecognized communication gaps may exist which can impede or obstruct the cultural resource planning process and highway construction. In an attempt to address these issues, the National Park Service (NPS) recently signed a Programmatic Agreement with the State Historic Preservation Offices of Wyoming and Montana and the Advisory Council on Historic Preservation outlining the responsibilities of each agency in the planning process (National Park Service 1993). Among the requirements for Yellowstone National Park was the development of an Archeological Treatment Plan. Assisting the park in meeting this obligation was the NPS-Midwest Archeological Center.

The portion of the completed Treatment Plan addressing historic sites (Hunt 1993) uses a historic context which is not only elemental to the national park system but also demonstrates considerable potential for broad application outside the system. The context is actually drawn from Yellowstone National Park's 1872 enabling legislation; that

*(**Hunt**—continued on page 26)*

Camping in the Upper Geyser Basin, 1882. Photo courtesy Haynes Foundation Collection, Montana Historical Society, Helena.

*(**Hunt**—continued from page 25)*

is, as a public park or pleasuring-ground for the benefit and enjoyment of the people (National Park Service 1933). In essence, Yellowstone is directly tied to a cultural phenomenon known as "tourism." Consequently, most sites within the original boundaries of the park can be studied, assessed, and interpreted from the context of tourism.

Although unprecedented as a subject of historical archeological inquiry, tourism has been a topic of anthropological inquiry for over 30 years and its appeal to the discipline is both basic and quite natural (Bodine 1981; Nash 1981; Crick 1989). It has been suggested that tourism represents the single largest movement of human populations outside wartime and is therefore a powerful force for culture contact and change (Crick 1989:309-310). Further, the form and goals of tourism are not only culturally determined but they also shift through time and from one culture to the next (Graburn 1989:28). As archeology has traditionally directed the greater portion of its research toward issues of culture change, tourism would seem a natural and entirely valid subject for archeological inquiry.

The model of tourism developed for Yellowstone draws upon the unique history of the national park while borrowing heavily from concepts and terminology in the anthropological literature. It uses a broad definition of tourism in order to maximize its applicability to the greatest number of sites. In essence, tourism is considered that activity characterized by travel, conspicuous consumption, and pursuit of other than normal (secular) activities (Graburn 1989, Robinson 1979, Smith 1981, Turner and Turner 1978).

Economically, tourism can be characterized as marginal, extremely dynamic, and multidimensional. It is marginal in that it is a service industry with no tangible product to export; its work force is largely engaged in tertiary occupations like catering, travel agencies, and so on; and it is often characterized by seasonal unemployment and minimal wages. Tourism is dynamic because it is basically an enterprise governed by fashion. As a result, tourist businesses must be able to adjust quickly to new conditions in order to survive over the long term. Finally, tourism is multi-dimensional in that it is composed of many spatially separate but nevertheless interdependent elements such as airlines, hotels, restaurants, tour operators, etc. The economic performance of these elements may be quite different from one another with any weak link in the system adversely affecting the otherwise economically healthy elements (Crick 1989:334; Robinson 1979:xxxi, 40).

The structural composition of tourism may be of particular interest to archeologists because tourist activity is reflected in the physical environment via historical sites. This physical environment is composed of at least three interacting sectors—the tourist, the external facilitator, and the internal facilitator (Crick 1989; Nash 1981; Robinson 1989).

The critical sector of the three is obviously the tourist. Tourist behavior can be seen as cyclic with individuals moving physically and ideologically from the "ordinary" to the "extraordinary" and back again. This process brings the tourist in contact with structures established expressly to facilitate their movement through this cycle.

Tourists are a natural focal point for Yellowstone as the park would certainly not exist without them. Tourists affect the park in a variety of ways. Their attitudes and perceptions can affect the form and roles of park management directly via comments and complaints to the management as well as more subtly through the political process. Tourists more directly influence the park's tour infrastructures. The form and strength of that influence varies according to each tourist population's mix of economic status, age and sex composition, and availability of leisure time. These variables, for example, restrict and define locations visited, season of tour, length of stay, and range of tourist expectations. These factors in turn influence the quality and types of tourist support facilities and entertainments available.

Historically, tourist populations at Yellowstone have changed dramatically, often within a very short time frame (see Haines 1977). For the first decade or so after the park was created, primitive transportation and support facilities tended to restrict the tourist population to people living near the park and a few very rich from the eastern United States and Europe. Travel assistance was uniformly absent,

Circa 1888 view of the pioneer Marshall-Firehole Hotel, Lower Geyser Basin. Photo courtesy Yellowstone National Park Museum Photograph Collections.

Four-horse coaching party on the road above the Upper Falls, Grand Canyon of the Yellowstone, early 1900s. Photo courtesy Haynes Foundation Collection, Montana Historical Society, Helena.

each group having to be self-sufficient throughout their tour. After the late 1870s, transportation routes constructed to and through the park provided ever greater access to Yellowstone. This increase in access escalated the number of tourists from distant areas. Socioeconomic conditions of the time were such that the composition of this population was largely restricted to the upper-middle and upper classes. Consequently, tourist accommodations improved rapidly with the addition of several luxury hotels to meet the expectations of that group.

By the 1890s, transportation and socioeconomic improvements brought greater numbers of the middle class to Yellowstone. This was paralleled by the introduction of lower priced lodges and permanent camps to the accommodation mix. The introduction of the automobile to Yellowstone in 1916 completed the democratization of Yellowstone touring. The touring population quickly came to be dominated by the working and middle classes and free automobile camps were introduced to the park to meet that group's lodging needs. Tourist support facilities became more democratic as a result providing a diversity of hotels, restaurants, campgrounds, and activities suitable to every sector of the tourist populace (Graburn 1989:30-31; Haines 1977:Chapter 22; Robinson 1979:19-20). Immediately after World War II, the transformation of park tourism had been completed. The railroads dropped out of the tourist transportation business and the large hoteliers were reduced to lesser roles in the overall range of tourist support facilities.

These changes in tourist demography should be evidenced in Yellowstone's archeological record as

a. fluctuations in the ratios of various kinds of lodging ranging from informal and formal campsites to luxury hotels;
b. variations in accommodation formality and site plan; and
c. changes in quantity and diversity of foodstuffs and products available to the tourist as demonstrated by artifacts deposited in occupational sites and associated refuse areas.

A second sector in the structure of tourism, the external facilitator sector, is composed of those agencies outside the tour center which identify and promote the center, provide support and supply services to tourists while in route to and from the center, and provide the materials necessary for the internal facilitators to operate. Examples of external facilitators include tour agencies, railroads, hotels, stage and bus lines, restaurants, etc. This sector can only be indirectly represented archeologically at Yellowstone as its components exist by definition outside the park boundaries. Nevertheless, many of the organizations and the strength of their influence should be represented in the variety, frequency, and types of materials delivered to the park and ultimately deposited in the living areas and park dumps.

The third sector of tourism, the internal facilitator, includes those agencies providing physical support and services to the tourist within the tour center. At Yellowstone, this sector includes elements of park management, transportation, and support and supply, all of which are directly represented in the park's historic sites and overlap to a considerable degree in function.

Park management at Yellowstone has a number of basic responsibilities which it must fulfill. Primary among these are the construction and maintenance of internal access routes (roads and trails), law enforcement, and regulation of concessions. Since the establishment of the National Park Service in 1916, management has also been responsible for interpretation and providing camping facilities. At Yellowstone, sites associated with management responsibilities are related to the military, fish hatcheries, museums and road side kiosks, poacher's cabins, automobile camps, and so on.

The second element of the internal facilitator sector, internal transportation, is intimately connected to the park management, the creators of transportation routes. It is equally connected to the internal support and supply elements which own vehicles and promote transportation through the park. This element is of extreme importance because the mode of transportation controls the scale and character of tourism at Yellowstone (see Haines 1977:Chapters 9 and 17; Culpin 1992:Chapters I-VII).

Internal transportation is composed of two technological entities—location, and form of individual routes; type of conveyance; rapidity of movement; and degree of access to the park's attractions. In addition, the internal transportation element is the primary entity influencing the number and location of tourist accommodations and other support

*(**Hunt**—continued on page 28)*

The Fountain Hotel (1891-1917), located in the Lower Geyser Basin, was the first luxury hotel built in the park interior. Photo courtesy Yellowstone National Park Museum Photograph Collections.

Tourists at Wylie Permanent Camp Roosevelt, 1915. Photo courtesy Haynes Foundation Collection, Montana Historical Society, Helena.

*(**Hunt**—continued from page 27)*

facilities in the park. Sites at Yellowstone associated with this element include road camps, garbage dumps, wagon roads, automobile roads, boat docks, equestrian and pedestrian trails, bridges, quarries, stage stations, barns and corrals, storage structures, water tanks, blacksmith shops, gasoline stations, and so on.

Internal support and supply, the third internal facilitator sector element, is the purview of the park concessionaire. This element is highly dependent upon and constrained by all of the other sectors and sector elements. For example, concessionaires require governmental approval and licensing to operate in the park. They are also dependent upon park management to identify and make accessible those attractions which will draw the public to the vacation area. The companies must then provide support facilities for the tourist which are necessarily founded on at least two additional factors which are at least in part beyond their control; i.e., the internal transportation system and the types of facilities expected by tourists. The type of internal transportation available restricts the concessionaire's choices with regard to location of hotels, luncheon facilities, stores, etc. We have already noted that the range of facilities and services offered to the touring public varies according to that population's demographic mix. Finally, the successful concessions entity must also be able to recognize and address the changing demands of tourists by closely following the fashion and trends of the industry and making appropriate changes in the tourist support facilities. Sites at Yellowstone National Park most directly related to the internal facilitator sector are hotels of various kinds, tent camps, dams and water rams, garbage dumps, storage buildings, restaurants, bathhouses, employee housing stores, logging camps, etc.

In conclusion, Yellowstone and other national parks contain an immense number of historical archeological sites which are complex in their form, content, and functional associations. Faced with this complexity, archeologists have often found themselves somewhat less than successful with regard to developing historic contexts useful for investigating, understanding, and assessing the significance of these resources. The tourism context provides the archeological community and cultural resource managers with a tool which can prove useful in understanding the broad spectrum of historic archeological resources in the parks. Further, the approach is sufficiently general to allow the context's adaptation and application to other locales where tourism is or has been the major economic focus and where sites relating to the operation and maintenance of the tourist industry can be expected to exist.

References

Bodine, John J.

1981 Comment on Tourism as an Anthropological Subject by Dennison Nash. *Current Anthropology* 22(5):469.

Crick, Malcom

1989 Representations of International Tourism in the Social Sciences: Sun, Sex, Sights, Savings, and Servility. *Annual Review of Anthropology* 18:307-344.

Culpin, Mary S.

1992 History of the Yellowstone Road System. Draft manuscript on file, United States Department of the Interior, National Park Service, Rocky Mountain Region, Denver.

Graburn, Nelson H.H.

1989 Tourism: The Sacred Journey. In *Hosts and Guests: The Anthropology of Tourism* (2nd edition), edited by Valerie L. Smith, pp. 21-36. University of Pennsylvania, Philadelphia.

Haines, Aubrey L.

1977 *The Yellowstone Story.* Yellowstone Library and Museum Association in cooperation with Colorado Associated University Press, Yellowstone National Park, Wyoming.

Hunt, William J. Jr.

1993 *Addendum to Archeological Treatment Plan for Yellowstone Federal Highway Projects, Yellowstone National Park, Wyoming: Historical Archeological Resources.* In *Archeological Treatment Plan for Yellowstone Federal Highway Projects,* prepared by the United States Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln, NE, for Yellowstone National Park, Federal Highway Administration, and Rocky Mountain Regional Office, National Park Service, Denver, CO.

Nash, Dennison

1981 Tourism as an Anthropological Subject. *Current Anthropology* 22(5):461-468.

National Park Service

1933 *Laws Relating to the National Park Service: The National Parks and Monuments.* Compiled by Hillory A. Tolson. National Park Service, Washington, DC.

1993 Memorandum to the Superintendent of Yellowstone National Park from the Associate Regional Director, Planning and Assistance, Rocky Mountain Region on the subject Programmatic Agreement, Parkwide Road Improvement Plan, Yellowstone National Park dated Feb. 3, 1993. File code H4217 (RMR-PP).

Robinson, H.

1979 *A Geography of Tourism.* MacDonald and Evans, Estover, Plymouth, England (amended version, first printed 1976).

Smith, Valene L.

1981 Comment on Tourism as an Anthropological Subject by Dennison Nash. *Current Anthropology* 22(5):475.

Turner, Victor and Edith Turner

1978 *Image and Pilgrimage in Christian Culture: Anthropological Perspectives.* Columbia University Press, New York.

William J. Hunt, Jr. is a supervisory archeologist, Midwest Archeological Center, National Park Service, Lincoln, NE.

ICCROM...that's an interesting acronym!

Richard J. Cronenberger

In a letter to the editor (*CRM*, Vol. 17, No. 5), Robert Bush, Executive Director of the Advisory Council on Historic Preservation, noted that our international programs issue (*CRM* Vol. 17, No. 3) did not mention ICCROM. The accompanying article by Rick Cronenberger provides readers with a first-hand account of an ICCROM experience, as well as information for future applicants.

Rome will forever feel like home to you. These are the words of Jukka Jokilehto, Chief of the Architectural Conservation Programme of the International Centre for the Study of the Preservation and the Restoration of Cultural Property, better known as ICCROM.

In 1993, I was fortunate to be one of two representatives from the United States to attend the Architectural Conservation Course. At the conclusion of the 18-week course, I was in total agreement with Mr. Jokilehto.

ICCROM was founded by UNESCO in 1959 as an autonomous, scientific, intergovernmental organization. The task of ICCROM is to contribute to the worldwide conservation and restoration of cultural property by initiating, developing, promoting, and facilitating conditions for such conservation and restoration.

ICCROM is governed by a body of member states which has included the United States since 1971. As of December 1993, there were 90 member states and 125 associate members (public or private nonprofit cultural institutions).

In addition to the Architectural Conservation Course, ICCROM offers two other regular courses: Mural Paintings Conservation and Scientific Principles of Conservation. ICCROM frequently offers short courses on Technology of Stone Conservation, Wood Conservation Technology, Paper Conservation, and Restoration and Rehabilitation of Earthen Architecture to name a few.

The aim of the Architectural Conservation Course (ARC) is to promote an informed approach to the philosophical and technical aspects of architectural conservation, which includes the protection of monuments, buildings, archeological sites, urban ensembles, rural areas, traditional settlements, and cultural landscapes. The intent of the course is not to teach recipes or to give ready-made answers to all problems in all countries, but to encourage the participants to open their minds to fresh ideas and look for sensitive solutions based on sound conservation theory.

The following principles guide ICCROM's mission:

(a) collect, study, and circulate information concerned with the scientific, technical, and ethical issues relating to the conservation and restoration of cultural property;

(b) co-ordinate, stimulate, or institute research by means of assignments entrusted to bodies of experts, international meetings, publications, and exchange of specialists;

(c) give advice and make recommendations on general or specific questions relating to the conservation and restoration of cultural property;

(d) promote, develop, and provide training related to the conservation and restoration of cultural property and raise the standards and practice of conservation and restoration work; and

(e) encourage initiatives that create a better understanding of the conservation and restoration of cultural property.

The ARC program is subdivided into four broad categories: Definition & Management of Cultural Heritage; Methods of Survey & Analysis; Conservation of Historic Structures & Material; and Management of the Built & Natural Environment.

The first three weeks concentrated on the history and theory of conservation and the International Charters on Conservation. The second three weeks concentrated on structural monitoring, humidity, and bio-deterioration and inventory, recordation, and documentation.

The third session (eight weeks) concentrated on the conservation aspects of material types, including stone, brick, mortars, earthen architecture, porous materials, and architectural finishes. Wood and timber frame buildings were discussed as well as concrete and metal. Laboratory exercises paralleled the materials discussion exposing the participants to simple but effective conservation experiments. The lab section was designed as a low tech, low cost alternative to expensive conservation labs.

Lectures in this section were more technically oriented, particularly the chemical and molecular discussions on porous materials. Italian crystallographer, Giacomo Chiari, presented this subject with humor, grace, and Italian flare, making it one of the most enjoyable topics. The materials lectures were well represented by Americans such as Tony Crosby and Dennis Montagna, NPS historical architects, and Frank Matero, architectural conservator at the University of Pennsylvania.

The final four weeks concentrated on the management of historic towns, gardens, landscapes, and broad urban conservation issues. This is a relatively new emphasis in response to development pressures throughout the world.

In addition to classroom lectures, trips were taken to critique conservation issues first-hand, including visits to Pisa, San Gimignano, and Tivoli. Several Roman restoration projects were evaluated, including work at the Pantheon, Villa Giullia, the Roman Forum, and the highlight, the restoration of Michelangelo's "The Last Judgment" at the Sistine Chapel.

One of the most rewarding aspects of the ARC was the interaction among colleagues from around the world.[1] It is enlightening to discuss resource issues with someone from India and realize that while resources are different in age and significance, similar conservation issues and philosophies apply. It is both comforting and disheartening to learn that we all face the same conservation issues: lack of financial resources, staffing, and increased development pressures on cultural resources.

While the ARC is designed primarily for architects, other professionals are encouraged to attend. The strength of the course comes from viewpoints of the

*(**Cronenberger**—continued on page 30)*

Architectural Conservation Course class photo at Ferrara, Italy. The author is in front row, fourth from left.

*(**Cronenberger**—continued from page 29)*

other professionals. In addition to the 18 architects, my class included a civil engineer, an artist, an art historian, an art conservation-restorer, an urban planner, and a craftsman. In 1994, Kathleen Fiero, Mesa Verde park archeologist, attended the course.

In addition to the regular course work, each participant was required to conduct individual research to take advantage of the extensive conservation library located at ICCROM as well as the libraries at the University of Rome and other institutions. Several team projects were also required which I enjoyed for the different viewpoints received from participating in a multicultural forum.

During the final week of the course, a trip to Ferrara was made to study urban conservation and review urban planning issues in the Poe River delta area. It was the highlight of the course with everyone relaxing and enjoying an extended trip outside of Rome.

Throughout the five-month course, there were several lectures conducted jointly with the other conservation courses, Scientific Principles of Conservation (SPC) and Mural Paintings Conservation (MPC). The different viewpoints toward conservation between the various professions really became apparent. In fact, some of the discussions got blood boiling.

The MPC aims to give conservators/restorers the theoretical and practical knowledge essential for diagnosing the causes of deterioration and selecting the most appropriate methods of conservation and restoration.

The SPC is responsible for the diffusion of knowledge in the field of "science for conservation" and for the development of a scientific approach for the conservation of materials and artifacts. These aims are achieved mainly through training, research, and technical advice.

The three main courses are offered from January to June of each year. Citizens of the United States apply to ICCROM courses through the Advisory Council for Historic Preservation. Applications should be sent to the Council by February 15 of the year preceding that in which the course is held. Applications are evaluated by the Council, ranked in priority order and forwarded to ICCROM for final selection. Notification usually occurs by late August, allowing about four months preparation. While tuition and fees at ICCROM are subsidized by member states, minimal fees are required to cover insurance, study tours, and textbooks. Participants are responsible for funding subsistence during the course and travel to and from Rome. All courses are taught in English with a few lectures involving an interpreter.

For information about ICCROM, contact the Advisory Council on Historic Preservation, Office of Communications and Publications, Attention ICCROM, The Old Post Office Building, 1100 Pennsylvania Avenue, NW, #809, Washington, DC 20004; 202-606-8503.

Since 1966, approximately 181 Americans have taken ICCROM courses, including the following 25 current and former NPS professionals.

Architectural Conservation		
Anne E. Grimmer	'71	WASO
Ali Akbar Miri	'75	SERO
Patrick R. Christopher *	'76	GOGA
Marlys Thurber *	'77	SWRO
Thomas E. Solan	'79	DEWA
Randall W. Copeland	'80	DSC
Walter Sedovic *	'83	NCRC
John M. Barrow	'84	SWRO
Michael Taylor*	'87	SWRO
Barbara D. Zook	'87	SWRO
Paul C. Cloyd	'88	DSC
Dennis R. Montagna	'89	MARO
Frank E. Briscoe *	'91	NCRC
Chandler W. McKoy	'92	NCRC
Richard J. Cronenberger	'93	ROMO
Kathy Fiero	'94	MEVE
Murals Painting Conservation		
Allen S. Bohnert	'88	SEAC
Judith M. Jacob	'94	NCRC
Brigit Sullivan	'93	NCRC
Preventive Conservation in Museums		
Diana Pardue	'84	STLI
Scientific Principles of Conservation		
Martin J. Burke	'77	HFC
Toby Raphael	'80	HFC
Brigit Sullivan	'83	NCRC
Stone Conservation		
Harold A. La Fleur, Jr.	'76	DSC
Judith M. Jacob	'91	NCRC
Wood Conservation		
Alan Levitan	'86	HFC

* No longer with the NPS

Note

1 Twenty countries were represented: Canada, India, Sri Lanka, Turkey, Spain, Israel, Pakistan, Germany, Guatemala, Portugal, Romania, United Kingdom, Poland, Czechoslovakia, Peru, Thailand, Mexico, Greece, Kenya, and the United States.

Richard J. Cronenberger is the Regional Historical Architect for the Rocky Mountain Region of the National Park Service. He has worked for the National Park Service for 15 years, beginning his career with the Historic American Buildings Survey. Mr. Cronenberger attended the 1993 session of the ICCROM Architectural Conservation Course. He lived in the Aventino section of Rome with his wife and young son.

Knight Foundry

Water Powered Foundry & Machine Shop—Since 1873

Ed Arata

California's mining industry played a major role developing hydro-power generation in the United States. Hard-rock miners during the late 1800s thrust themselves to the forefront of mining technology, facing new and unique problems extracting the mineral wealth of the Mother Lode. One of their key needs was to develop a water power source matching the resources to the demands of their mining activities. Early operations relied on known water wheel technologies, such as the overshot, the undershot, and breast designs. These proved too inefficient for the power needs and water conditions of the region. Steep topography and limited water flow during part of the year encouraged millwrights to develop a wooden, high pressure water wheel or "hurdy-gurdy." The first cast-iron, tangential water wheels evolved from the early designs developed by grass-roots engineers in the foothill gold camps, such as Nicholas Colman, D. Donnelly, Lester Pelton, and Samuel Knight.

Knight Foundry

The Knight Foundry was established in 1873 (possibly as early as 1871) originally as the Campbell, Hall & Co., to better meet the ever-expanding needs of the Mother Lode mines and to produce the patented Knight water wheel. Samuel Knight, a partner with Campbell and Hall at the beginning of their foundry venture, later bought them out with his new partner George Horne. Knight, a ships carpenter, worked at mine construction sites in Calaveras and Amador counties, where he began to develop a more efficient water wheel.

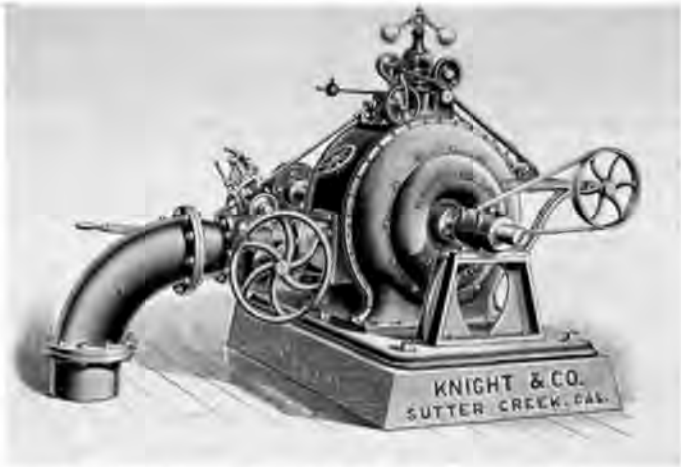
Knight Foundry is the historic site that produces the castings required to keep other restorations and historic sites up and running.

The Knight Catalog of 1896 gives a brief history of Knight's work:

"About 1866, Mr. Knight, in common with others, made water wheels entirely out of wood. The buckets were shaped like saw teeth, and wooden flanges covered the sides of the bucket to confine the water; a round nozzle was used and the general results were considered at the time highly satisfactory.

"The next step (1868) was to make a wooden water wheel with iron buckets, giving them a curve and discharging the water toward the center of the wheel, still using a round nozzle.

"In 1870 a man named Colman patented a wheel which had a bucket shaped very much like that of the present Pelton Bucket, the stream splitting and curving off to each side. He, for lack of means, did not develop the idea.



Turbine for generator. Graphic from the Knight catalog, c. 1896. Courtesy Knight Collection, Jackson, CA.

"Mr. Knight made several improvements in 1872 by using a curved iron bucket and having the discharge towards the center and to one side. Knight also found that the round nozzle did not fill general requirements, from these water wheels sprang the present Knight Wheel.

"In 1875, the first wheel of present design was placed at the Lincoln Mine at Sutter Creek, and from that time various improvements have been made in the size and arrangement of the slits in the nozzle and shape of the buckets, until at this present time, Mr. Knight is manufacturing a wheel that, for general utility and economy, challenges competition."

As indicated, Knight's work over a number of years led to his patenting of a cast iron, high speed, water wheel which became the forerunner of the Pelton Wheel.

Knight's Water Wheel catalogs of the 1880s and 90s show that more than 300 wheels had been produced and were in wide use all over the western United States and some had even been exported. It was claimed that Knight wheels were being used to power over 2,000 stamps in quartz mills. Knight also produced a water "motor" which was a small water wheel enclosed in a cast iron housing, ready to be attached to a high pressure water source. These water motors were very popular and, prior to the advent of electric motors were used to run numerous applications. Water motors came in four sizes: 6", 12",18" and 24."

After 1883, the Knight Water Wheel experienced heavy competition from the Pelton Water Wheel. Although Knight had been the acknowledged leader, Lester Pelton's design was being tried in northern mines of the Mother Lode; some felt it was a better design. In 1883, the Idaho mine in Grass Valley decided to try to settle the issue by inviting Knight, Pelton, and two other wheel producers to Grass Valley to conduct tests of comparable wheels. During these trials, Pelton's design proved the most efficient, winning the contract to supply wheels to the Idaho mine. The Pelton Water Wheel Company went on to become the leading producer of impulse type wheels, eventually moving its operation to San Francisco.

*(**Arata**—continued on page 32)*

(*Arata—continued from page 31*)

Knight continued to produce wheels into the early 1900s. Complete wheel and governor sets were supplied to some of the first hydroelectric plants in the western U.S. Among these were the White River project in Oregon, the Pioneer Electric Power Company in Ogden, Utah, and the Power, Transit and Light Company of Bakersfield in the early 1900s.

Although it was no longer the prime producer of water wheels, Knight & Co. continued to flourish in the late 1800s and early 1900s as an innovative manufacturer of mining equipment, hydraulically activated dredger buckets, dredger pumps, hydraulic engines, speed governors, and hoisting works. Knight & Co. held U.S. Patents for seven different pieces of machinery designed and produced in their shops.

For 50 years from the early 1900s to mid 1950s, the foundry continued producing mining equipment for the now famous gold mines of the Mother Lode, but it also became instrumental in the production of machinery for the timber and lumber industries. Knight's Foundry supplied some of the original equipment installed in the saw mills of the central California foothills and later replacement parts and repair facilities. Knight Foundry has counted most of the major lumber and timber operations in northern and central California among its customers, along with (in more recent years) clay, sand, gravel, and gold dredging operations.

Over the past 20 years, as well as supplying new and replacement equipment to the mining and timber industries, Knight has produced machine parts for other manufacturers of pumps and agricultural equipment. It has also produced reproduction architectural iron work for the California state capital building restoration and for restoration projects in Old Sacramento.

Knight Foundry Today

Knight Foundry continues to function as the last water-powered foundry and machine shop in the United States. Still using the 42″ diameter wheel installed by Samuel Knight in the 1870s, the machine shop is powered by water falling over 400′ from the ridge above Sutter Creek. The Tanner Reservoir which supplies water to Knight Foundry was built in the late 1870s as part of the Amador Canal to supply water power to the mines of central Amador County. The Amador Canal, through a system of wooden flumes, ditches and man-made lakes, carried water over 50 miles from the Mokelumne River to ensure a dependable year round power supply. Apart from the main water wheel, small wheels throughout the site operate other pieces of machinery. A 24″ wheel drives the air compressor and was originally used to power the blower for the air supply to the furnace in the foundry room. Two 12″ water motors power lathes and the table saw in the pattern shop. An 18″ motor powers the planer in the machine shop. A 12″ motor drives the grinder in the foundry; and others run the tumbler, the clay processing mill, the hoist for the drop ball, and the firewood table saw.

Foundry & Machine Shop, Knight Foundry, Sutter Creek, CA. Courtesy Knight Collection, Jackson, CA.

Casting iron, Knight Foundry. Photo by Carolyn Fox, Jackson, CA.

Knight Foundry is believed to be the only water-powered foundry and machine shop in the U.S. and has been in continuous operation since 1873. Our site is listed on the National Register of Historic Places, is designated as a California Historical Landmark, and has recently been designated a historic site by the American Society of Mechanical Engineers (ASME).

Knight Foundry operated as a commercial foundry until 1991, when the owner closed it due to sagging economic conditions. It was reopened in July 1992 by Historic Knight & Co., Ltd. both to keep the foundry operating, and to begin developing historical tourism and education programs related to the site.

Tourism and Education

The site now offers a self-guide tour to visitors on a daily basis. Visitors receive a walking tour guide which leads them through 20 stops along the tour route, explaining the history and operation of the site. Guided group tours are available by reservation. In addition to tours, schools are encouraged to use the site for field trips. Two types of field trips are offered: the first, a two-hour program includes time with a blacksmith; the second, a six-hour program, starts in Jackson and finishes with a tour of Knight Foundry. This program gives students a better grasp of how mines in Amador County operated and why Knight Foundry was needed to supply heavy equipment.

Knight Foundry has developed a three-day "hands-on" workshop for adults. The Industrial Living History Workshop, advertised nationwide, has been well received. Students actually work in the foundry, machine shop, blacksmith shop, and pattern shops to learn the skills of the late 1800s. The class regularly has 21 to 28 students, assembled into groups of seven. At each work station students receive a brief introduction to the craft and are then given an opportunity to practice these hand skills under the direction of experienced instructors. Students are encouraged to bring foundry projects with them; these may be molded and cast as part of the workshop. In the foundry, students receive instruction in the basic skills of green-sand molding; they then are allowed to mold several items. In the machine shop, students are introduced to water-powered machine tools and then given an opportunity to operate the lathes, planers, and radial-arm drill press. The blacksmith portion gives students the chance to do some forge work while producing several items. Students learn the basics of pattern making in the pattern shop and finally are shown how the cupola furnace is prepped and fired for a melting operation. During the final session, those students who wish to participate may also step in with the foundry staff to pour some iron castings.

During recent workshops, students from all walks of life have come to Sutter Creek to experience turn-of-the-century technology. Several participants have produced castings that they will use in restoration projects. In June 1994, Jon Mulholland from the NPS San Francisco Maritime Museum took the class and was able to produce rudder pins for the ferryboat *Eureka,* to replace an original 100-year old pin that was lost. Commenting on the Foundry, Jon said: "Using traditional methods lends authenticity. This is our only option for reproducing historic castings. They have a full pattern shop and machine shop ... there is no other resource to duplicate these patterns." Past students have returned home and produced foundry patterns from which the Foundry then produced castings. Some of these included parts for a Shay locomotive restoration project and the tailstock for an antique lathe. Other projects of the Foundry included fire box grates for a Case steam engine, exhaust manifolds for a 1936 Packard, assorted gas engine parts, printing press parts, and weights for an 18th-century French clock. Finally, one of their yearly customers is an excursion railroad near Yosemite. They run an old Shay locomotive and cars on a section of logging track in the foothills of the Sierra Nevadas. The track is very steep and crooked so they go through lots of brake shoes. The Foundry supplies them about 24 brake shoes each spring.

A non-profit organization, Friends of Knight Foundry has also been formed to assist with the preservation and educational programs associated with the site. They have begun to develop a long-range plan for acquiring, operating and preserving the site; and to begin fund raising activities.

Ed Arata is the manager of Historic Knight Foundry in Sutter Creek, CA. For more information, you may call Mr. Arata at 209-267-5543.

Current Issues in Archeological Protection for the Department of Justice

The statement that follows was presented to the Interagency Archeological Protection Working Group (IAPWG) on February 7, 1994, by Jo Ann Harris, Assistant Attorney General, Criminal Division, United States Department of Justice. IAPWG is an informal headquarters-level organization representing federal agency chief law enforcement officers, departmental solicitors, and the appropriate divisions with the Department of Justice. IAPWG meets periodically to exchange information, identify needs, and implement programs and actions to improve archeological resources protection nationwide. This recent IAPWG meeting was held in the National Park Service Director's Conference Room at the Department of the Interior, and Ms. Harris was introduced by Jerry Rogers, Associate Director for Cultural Resources, National Park Service.

Thank you, Mr. Rogers, for your very gracious remarks. It is my pleasure to provide some brief comments on an area in which I have both a professional and personal interest—"Current issues in archeological protection for the Department of Justice." Indeed, this is probably the first time ever that the Assistant Attorney General for the Criminal Division has a history of literally digging in the dirt with a bunch of wonderful archeologists both in the United States and the far reaches of Siberia. My interest: Prehistoric North America.

This is an exciting time for all of us who are concerned about the protection of the richly varied archeological resources which constitute part of the treasure of our history and pre-history in the United States.

Since the enactment of the Archeological Resources Protection Act of 1979 (ARPA), 16 U.S.C. § 470aa et seq., and the recent enactment of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), a portion of which is codified as the Illegal Trafficking in Native American Human Remains and Cultural Items Act, 18 U.S.C. § 1170, we now have tools which, if utilized properly—in a criminal, civil or administrative context—or some combination thereof, can be an effective deterrent in preventing further destruction of our archeological and cultural resources.

On January 18, 1994, the United States Supreme Court denied certiorari in an important case construing a key provision of the Archeological Resources Protection Act. In *United States v. Gerber*[1], Judge Posner of the Seventh Circuit Court of Appeals held, for a unanimous court, that section **470ee(c)** of ARPA was **not** limited to archeological objects removed from federal and Indian lands but that it also applied, in certain circumstances, to the removal of archeological resources from private property without the owner's permission. In *Gerber* the "Indian relic" predators, without permission, entered upon land in Indiana owned by the General Electric Company and,

(**Harris**—*continued on page 34*)

(*Harris—continued from page 33*)

in a manner that constituted criminal conversion and criminal trespass under Indiana state law, excavated and removed numerous prehistoric artifacts from an ancient burial mound affiliated with the "Hopewell phenomenon" culture. This "GE Mound" in southwestern Indiana was one of the five largest Hopewell burial mounds known. Gerber and his cohorts tore it apart. The case was successfully prosecuted by the United States Attorney's Office for the Southern District of Indiana.

As Assistant Attorney General, Criminal Division, Department of Justice, Jo Ann Harris leads a Division of 400 Federal prosecutors and lawyers charged with enforcing the nation's criminal laws and formulating national law enforcement policy.

Prior to her nomination in the Fall of 1993 to head the Criminal Division, Jo Ann Harris was a Manhattan-based sole practitioner with a Federal practice specializing in white collar crime. Before entering private practice in 1983, she was a Federal prosecutor in the Southern District of New York, first as an Assistant United States Attorney, then as Deputy Chief of the Criminal Division, and finally as Executive Assistant United States Attorney. Between 1979 and 1981, she was based in Washington as Chief of the Fraud Section, Criminal Division at the Department of Justice.

Jo Ann Harris has served on three Independent Counsel staffs in connection with the Washington-based investigation of corruption at the Department of Housing and Urban Development during the 1980s, the 1990 investigation of New York Mayor David Dinkins, and the 1985 investigation of the Charles Point Resource Recovery Facility in Westchester County, New York.

Ms. Harris has been a teaching team leader and team member in a multitude of programs for the National Institute for Trial Advocacy (NITA), and in 1990 she was awarded the NITA Faculty Award "for inspiration, excellence and dedication for fourteen years of service in teaching advocacy skills." She also has held an appointment as Lecturer at Harvard Law School, and has taught Trial Skills at numerous law schools including Emory, Fordham, New York University, Pace, and Hofstra. During 1992-1993, Ms. Harris held an appointment as Visiting Professor and Director of Trial Advocacy at Pace University. She also was a member of the Board of Pace University's Battered Women's Justice Center and has led teams of lawyers teaching young lawyers how to represent battered women in court.

Jo Ann Harris maintains an intense interest in archeology and prehistory. She has been an active member of the Center for the Study of the First Americans for several years, as well as serving on its Advisory Board, and has been a participant in formal archeological excavations at the Mammoth Meadow site in southwestern Montana.

A report on the training course, "Overview of Archeological Protection Law," and Ms. Harris' presentation during that 16-hour interagency, intergovernmental program will be published in the Federal Archeology Report, *volume 7, number 3, which will be available in early winter, 1994.*

Gerber, in combination with *United States v. Austin*[2], a decision of the Ninth Circuit Court of Appeals which upheld the constitutionality of ARPA, provides a sound legal basis for successful criminal prosecutions under ARPA. Given this current state of the law we see no sound legal reason for not prosecuting appropriate ARPA violations, even when they occur on private property.

Investigations

Historically, almost all criminal ARPA offenses have been investigated by agents and archeologists employed by the federal agency that has responsibility over the land on which the unlawful excavation and removal occurred, with the Federal Bureau of Investigation being called in to assist, if requested, in major investigations or when no federal land managing agency has jurisdiction—as was the case in the *Gerber* prosecutions. Any subsequent federal prosecution is then pursued by the responsible United States Attorney's Office, with legal assistance provided, if requested, by attorneys with the Criminal Division of the Department of Justice.

Prosecutions

A paramount interest of the Department of Justice is ensuring that there are sufficient Assistant United States Attorneys located throughout the country who are versed in the various technical requirements of ARPA and other criminal and civil provisions which can be used to prosecute archeological resource violations, such as the theft of government property statute [18 U.S.C. § 641] and the depredation of government property statute [18 U.S.C. §1361]. To this end, Department of Justice Criminal Division attorneys provide two on-going services and assist in a third.

1. Inquiries

First, attorneys from the General Litigation and Legal Advice Section and the Asset Forfeiture Office are available to respond to any criminal and forfeiture matter inquiry by any Assistant United States Attorney or any attorney, investigator, archeologist or other employee of any federal agency involved with archeological protection enforcement activities.

2. The Book

Second, in 1992, Criminal Division attorneys, in conjunction with the Archeological Assistance Division and other members of the Interagency Archeological Protection Working Group, prepared a two-volume loose-leaf publication entitled "Archeological Resources Protection: Federal Prosecution Sourcebook." This Sourcebook has been distributed to all 94 United States Attorney Offices plus all branch offices of the United States Attorneys. In addition, the Archeological Assistance Division has distributed the Sourcebook to a wide variety of agency attorneys, land managers, archeologists and criminal investigators along with officials with various Indian tribes. We feel that this Sourcebook, which is supplemented annually, is a valuable training tool which further educates its users and, we believe, eventually leads to more ARPA prosecutions.

3. The Conference

Finally, Criminal Division attorneys, in association with the Archeological Assistance Division and the Executive Office of United States Attorneys of the Department of Justice, participate in the annual two-day conference on "Overview of Archeological Protection Law" co-sponsored by the Archeological Assistance Division and the Department of Justice. This conference has provided intensive training to over forty Assistant United States Attorneys in addition to a number of agency personnel and other individuals involved in the preservation of our rich archeological heritage.

Thank you for the chance to present these short remarks. I look forward to working with you to help protect our archeological resources.

Notes

[1] 999 F. 2d 1112 (7th Cir. 1993), cert. **denied,** 114 S. Ct. 878 (January 18, 1994). The lead defendant, Arthur Gerber, was sentenced in July 1992 to 12 months imprisonment followed by 3 years supervised release, in addition to a $5,000 fine, a $125 special assessment, and a $4,750 forfeiture. Gerber was also ordered not to sell, purchase, barter, excavate any archeological resources, nor sponsor, organize, or attend any shows or exhibitions that have any archeological resources exhibited. Gerber commenced serving his imprisonment at the Fort Worth Federal Correctional Institution in May 1994. Gerber's four associates were all sentenced to 2 years probation with the condition that they serve specified periods of either work release or home detention ranging from 30 days to 180 days. Two of these associates were also fined $2,000 and $5,000. All of the defendants commenced serving their sentences in May 1994.

[2] 902 F. 2d 743 (9th Cir.), cert. denied, 498 U.S. 874 (1990).

Teaching with Historic Places Lesson Plans

The National Park Service's National Register of Historic Places and the National Trust for Historic Preservation are pleased to announce the publication of five new Teaching with Historic Places lesson plans.

- First Battle of Manassas: An End to Innocence
- Camp Hoover: A Presidential Retreat
- Woodrow Wilson: Prophet of Peace
- Life on an Island: Early Settlers off the Rock-Bound Coast of Maine
- Castolon: A Meeting Place of Two Cultures

For more information, please write to:

The Preservation Press
National Trust for Historic Preservation
1785 Massachusetts Avenue, N.W.
Washington, D.C. 20036

or call, toll free: (800) 766-6847

Preparing for the 50th Anniversary of Guam Liberation: Metals Conservation Course and Demonstration Project

Phase II of the Conservation Management of Historic Metals in a Tropical Marine Environment Training Course and Demonstration Project was held in June, at War in the Pacific National Historical Park (WAPA). Phase I was held on Wotje Atoll in the Republic of the Marshall Islands in December 1992 (see "Saving WWII Historic Sites: Metals Conservation Course in the Marshall Islands," *CRM* Vol. 16, No. 5, 1993). At the request of Superintendent Edward Wood, Phase II of the training course was moved to WAPA in Guam. Plans for the faculty of Phase II to stop in the Marshall Islands to inspect and monitor the 120mm gun that was cleaned, primed, and painted with two different paint systems during Phase I was canceled when we learned the runway on Wotje was closed for repairs.

Phase II served two purposes: (1) students from NPS, the U.S. Navy, Guam (GU), Commonwealth of the Northern Mariana Islands (CNMI), Republic of Palau (RP), and the Federated States of Micronesia (FSM) were trained and three WWII guns were cleaned, primed, and painted in preparation of the 50th Anniversary of Guam Liberation Day, July 21, 1944. Phase II was sponsored by the Western Regional Office (WRO) of the National Park Service, WAPA, the Guam Historic Preservation Office, and the Republic of the Marshall Islands in cooperation with the Arizona Memorial Museum Association and was funded by WAPA and the FY94 NPS Cultural Resources Training Initiative.

*(**Look and Spennemann**—continued on page 36)*

200mm (8-inch) coastal defense gun prior to treatment.

(*Look and Spennemann—continued from page 35*)

The course was developed and chaired by David W. Look, AIA, Chief, Preservation Assistance Branch (PAB), Division of National Register Programs (DNRP), WRO, and taught by Mr. Look; Dr. H.R. (Dirk) Spennemann, Charles Sturt University (CSU), Albury, Australia; Dr. Ellen G. Segan and Alfred Beitelman, Construction Engineering Research Laboratory (CERL), U.S. Army Corps of Engineers; Hank Florence, Regional Historical Architect, and Jonathan Bayless, Regional Curator, WRO.

For Future Use: A Management Plan for the World War II sites in the Republic of the Marshall Islands, by Mr. Look and Dr. Spennemann, has been published and single copies are available from the Division of Natural Resources Programs, WRO. The conservation management of historic metals consists of the identification and documentation of the cultural resources, development of the historic context and statement of significance, assessment of condition, the development and evaluation of various treatment options, and the development of a conservation management plan which includes preventive conservation, treatment, and

Dr. Dirk Spennemann documenting the condition of the 20mm dualbarrel anti-aircraft gun prior to treatment.

monitoring. Although the course and demonstration project dealt mainly with the treatment of WWII guns, the work must be understood and undertaken as part of the overall preservation process. One does not jump to treatment options without understanding what the resource is and why it is worthy of preservation.

The course workbook included a number of new background notes on the British armament trade with Japan, Japanese coastal defense strategy in Micronesia, the Pacific War in Micronesia, recording coastal defense guns and emplacements, writing conservation management plans, and some of the different guns used and still in existence in Micronesia.

Dr. Segan taught metals, different types of corrosion, and corrosion removal and prevention. She brought several sets of laboratory equipment and supplies so that the students could observe and measure the electrochemical potential between different metals and develop their own galvanic series. Mr. Beitelman taught paint and paint preparation. He brought and demonstrated various tools

The guns after treatment with from left to right: Jamie White, SAFR; Joe Harrell, GGNRA; Bruce Vanvick, SAFR; Al Beitelman, CERL; and Jonathan Bayless, WRO.

and gauges for measuring and testing the thickness of coatings and discussed application equipment.

Different cleaning and preparation methods were demonstrated and discussed. To illustrate the methods and their effects, four rusted railroad spikes were used. After initial inspection and photographing, one was kept as a control specimen in its original rusted condition, one was cleaned mechanically with a wire brush, one was cleaned using electrolysis, and one was sandblasted.

For the demonstration project the guns to be treated were moved from their location on the beach to the WAPA maintenance building to protect the guns and personnel from sun, rain, and wind. Prior to cleaning the Japanese guns, the students identified and documented the 200mm coastal defense, the 20mm twin-barrel antiaircraft, and the 47-mm anti-tank guns. Laurence A. Pace, Pace Art Conservation Enterprises, Inc., Honolulu, discussed paint analysis and demonstrated taking samples.

The original goal of the demonstration project was for each student to get experience in sandblasting and spray painting. This proved to be impossible because of the lack of adequate protective clothing. Most of the actual work was demonstrated and done by three painters, Joe Harrell, Golden Gate National Recreation Area (GGNRA), and Bruce Vanvick and Jamie White, San Francisco Maritime Museum (SAFR), under the supervision of Mr. Beitelman (CERL) and Mr. Bayless (WRO). Since Mr. Harrell brought the heaviest coverall, he did most of the sandblasting using copper slag and silica sand.

The guns were primed with a corrosion-inhibiting zinc-rich two part epoxy and painted with finish coats of an aliphatic polyurethane. The guns had previously rested on the lawn at the beach. The bases were highly corroded because of their contact with the soil, moisture, and decay vegetation. Before the guns were returned to the beach, concrete slabs were poured and cured.

The course also included field exercises in identifying and recording the guns at Piti and site visits to other guns. All of the students earned high scores on both their written and oral exams.

David W. Look
H.R. (Dirk) Spennemann

Viewpoint

Letters

Dear Editor:

Architectural salvage and the falsification of history, the subject of Carol Rosier's article (*CRM*, Vol. 17, No. 5), has been of concern to the Society for the Protection of Ancient Buildings at least since 1880 when it was raised at our Annual General Meeting.

The Society is still uneasy about it, for the reasons given in the article, but also for some related ones that may not apply in other countries. In Britain, we fortunately now have such effective legal controls over the demolition or stripping of historic buildings that much salvage that now comes on to the market legally is relatively recent. Sadly, this is less true of 19th century church fittings.

More serious is the problem of theft. Growing public interest in salvage has meant that high prices can be paid for chimneypieces, paneling and other decorative items. This has attracted the thieves, and many fine historic interiors have suffered from their crude attentions. Indeed, in Edinburgh, I recently saw several empty Georgian houses with prominent signs warning thieves that all chimney-pieces had been removed to safe storage. Nor is it only architectural features: traditional slate roofs on barns disappear over night.

It is, of course, a cannibalistic trade, which draws on a steadily decreasing source of supply. In Britain, small scale manufacturers of traditional materials such as stone slates find it hard to keep going. We would much rather that owners of old houses bought newly-made traditional materials, ensuring their long-term continuity, or in the case of decorative items use the skills of today's craftsmen.

Philip Venning,
The Society for the Protection of
Ancient Buildings
London

Dear Editor:

Our congratulations on the interesting and informative thematic issue of *CRM* entitled "Archeology and the Federal Government" (Volume 17, No. 6, 1994).

We are concerned, however, about the article on page 33 on the National Park System Archeology Program which is an unrevised reprint of our article on the park archeological program contained in the *CRM Bulletin* of July 1988. During the six years that have elapsed since the original article was published there have been important changes in the program. The 1994 published article contains out-of-date information.

The park system has grown from the 340 areas in 1988 to 366 areas today, about a 7% increase in park units. And the acreage of the system continues to grow through the addition and expansion of park areas, especially in the western United States. Also, there are eight research facilities instead of the four archeological centers listed in 1988, and approximately thirty parks have resident archeologists instead of ten, despite the fact that seven parks lost staff archeologists during the last year or so. This figure will continue to change since the number of park archeologists is expected to increase due to a professionalization initiative and a restructuring initiative designed to place more resource specialists in parks.

We also now have a functioning, albeit still developing, field-based applied ethnography program, which did not exist in 1988. Five of our regional offices have regional ethnographer positions (Alaska, North Atlantic, Pacific Northwest, Rocky Mountain and Southwest). The park-applied ethnography program addresses data development and effective partnerships with Native American and other communities with traditional associations to natural and cultural resources within units of the national park system. The goal is to promote informed protection and appropriate use of the cultural and natural ethnographic resources that associated groups value.

While the remainder of the article outlines the current park archeological program, we are concerned that some readers may cite the out-of-date information in discussing either it or the still developing park ethnography program. Accordingly, we hope that you will print this letter in the next issue of *CRM* to provide your readers with the current information on these two park system programs.

Again, we congratulate you and your many contributors on a very timely, useful, and informative thematic issue of *CRM;* and we appreciate the effort that went into its production.

Douglas H. Scovill
Chief, Anthropology Division

Craig W. Davis
Senior Archeologist

Preservation Resources

Publications

A practical Introduction to Videohistory: The Smithsonian Institution and Alfred P. Sloan Foundation Experiment, edited by Terri A. Schorzman. This book provides an introduction for historians to the use of video in research. Other books available in the Public History Series include *History Outreach: Programs for Museums, Historical Organizations, and Academic History Departments*, edited by J.D. Britton & Diane F. Britton; and *Corporate Archives and History: Making the Past Work*, edited by Arnita A. Jones and Philip L. Cantelon. For ordering information, contact Krieger Publishing Co., P.O. Box 9542, Melbourne, FL 32902-9542; 407-724-9542.

The Beat of the Drum by Don McDowell. The people, personalities, and events of Drum Barracks' colorful 130-year history are told in a highly readable style and is an indispensable story for history buffs of the Civil War and Indian wars in the far west. For more information, contact Drum Barracks Civil War Museum, 1052 Banning Blvd., Wilmington, CA 90744; 310-548-7509.

Vestiges of Mortality & Remembrance: A Bibliography on the Historical Archaeology of Cemeteries, by Edward L. Bell. With increasing demands for archeological assistance to identify and preserve threatened historical cemeteries, this comprehensive reference work will prove useful. An introductory essay provides an overview of scholarly trends and prospects, demonstrates the interpretive potential of historical mortuary sites, and offers a means to integrate multidisciplinary inquiry within a broader view of the historical past. This book will benefit archeologists, cultural anthropologists, and others involved in cemetery preservation and in the debate on the repatriation of curated human remains and funerary material.

For more information, contact Scarecrow Press, P.O. Box 4167, Metuchen, NJ 08840; 1-800-537-7107.

Care and Maintenance of Wood Shingles and Shake Roofs, by S.S. Niemiec and T.D. Brown. Pamphlet includes section on safety precautions as well as chemical, preservative, and oil treatments. To order, contact Oregon State University Extension Service, Publications Orders, Agricultural Communications, Administrative Services A422, Corvallis, OR 97331-2119; 503-737-2513. Also avail-

*(**Resources**—continued on page 38)*

(Resources—continued from page 37)

able is their *Educational Materials Catalog* (free) which lists a broad range of other informative publications.

Historic Louisiana Nails: Aids to the Dating of Old Buildings, by Jay D. Edwards and Tom Wells. This new study treats the development of nail-making technology, the gathering and preparation of historic nails, and strategies for the dating of old buildings. The book functions as a unique primer for the identification of the 12 basic nail types found in Louisiana area buildings dated between c. 1700 and 1900. For ordering information, write Geoscience Publications, Department of Geography & Anthropology, Louisiana State University, P.O. Box 16010, Baton Rouge, LA 70893-6010.

How Superstore Sprawl Can Harm Communities and what citizens can do about it, by Constance E. Beaumont. Discusses social, economic, and environmental problems caused by superstore development and provides readers with tools to stop or abate sprawl and encourage new development that enhances their towns. To order the 120-page guide, contact the National Trust for Historic Preservation, Department of Public Policy, 1785 Massachusetts Avenue, NW, Washington, DC 20036; 202-673-4031 or -4255.

Preservation Briefs

The Preservation Assistance Division of the National Park Service is now offering the newest "Preservation Briefs" (numbers 24-34) as a set for $14.00. Stock Number: 024-005-01139-1. Make checks payable to Sup. Docs. and mail to: Superintendent of Documents, Government Printing Office, P.O. Box 37194, Pittsburgh, PA 15250-7954.

Bulletin Board

Advisory Council Training Schedule

The Advisory Council on Historic Preservation will be offering 16 open enrollment sessions of its introductory training course, **Introduction to Federal Projects and Historic Preservation Law,** in 15 cities during 1995. Designed by the Council to explain the responsibilities of federal agencies under the National Historic Preservation Act (NHPA), the course focuses on the requirements of Section 106 of NHPA, which applies any time a federal or federally-assisted project, action, or undertaking could affect a property listed on or eligible for the National Register of Historic Places. Participants will learn the review and compliance process defined in the Council's regulations, "Protection of Historic Properties" (36 CFR Part 800), and the procedures to follow in order to comply with the law.

In addition to the introductory course, the Council now offers an advanced course through a cooperative arrangement with the University of Nevada, Reno. **Advanced Seminar on Preparing Agreement Documents Under Section 106 of the National Historic Preservation Act** is a detailed, expert-oriented seminar on how to prepare the paperwork required by the Council's regulations at 36 CFR Part 800: Memoranda of Agreement, Programmatic Agreements, and Determinations of No Adverse Effect. To qualify for the seminar, participants must have successfully completed "Introduction to Federal Projects and Historic Preservation Law" or have extensive experience working with Section 106 and its regulations.

To register for one of the sessions or to obtain additional information, call the University of Nevada, Reno's Division of Continuing Education at 1-800-233-8928.

ALHFAM

The annual meeting of the Association of Living Historical Farms and Agricultural Museums (ALHFAM) will be held in Tallahassee, FL February 3-5, 1995. This year's theme is "Living History: A Work in Progress." To register, contact the Tallahassee Museum of History & Natural Sciences, 3945 Museum Drive, Tallahassee, FL 32310; 904-575-8684.

Call for Entries

The White House invites entries for the Fourth Round of the Presidential Design Awards to recognize excellence in design accomplishments and to honor those individuals who have made outstanding contributions to federal design. Works that have been sponsored, authorized, commissioned, produced, or supported by the U.S. Government are eligible and must have been completed and in use between June 1, 1984 and June 1, 1994. Deadline for entries is October 31, 1994. For an entry form or information about the Awards, call Thomas Grooms at 202-682-5437.

National Trust Conference

The National Trust for Historic Preservation will hold its 48th National Preservation Conference in Boston, MA, October 26-30. Sponsored by the National Trust, National Park Service, The American Institute of Architects, The Trust for Public Land, Massachusetts Housing Finance Agency, and Massachusetts Historical Commission, this year's theme will be "Preservation, Economics and Community Rebirth."

For more information, contact Tuesday Georges at the National Trust for Historic Preservation, 1785 Massachusetts Avenue, NW, Washington, DC 20036; 202-673-4141.

RESTORE Course

A two-semester course on masonry conservation will be offered by RESTORE from October 1994 to May 1995. Participants will learn how to analyze and resolve complex problems they encounter daily when dealing with the maintenance and preservation of masonry structures.

RESTORE is a national not-for-profit educational corporation which, since 1976, has offered a range of programs related to building conservation and preservation maintenance technology to people in the building industry. The principle objective of RESTORE is to provide state-of-the-art education in building conservation and restoration technology to design professionals, craftsmen, contractors, building owners and managers, preservationists, and others in the building trades.

Tuition for the RESTORE Course on Masonry Conservation is $1,200 which includes lab fees and printed course materials. For an application and further information about the RESTORE Program, contact Jan C.K. Anderson or Anne B. Jamieson at RESTORE, 41 East 11th Street, New York, NY 10003; Phone: 212-477-0114; Fax: 212-475-7424.

New River Symposium

Papers for the New River Gorge National River Symposium, to be held April 7-8, 1995 in Daniels, WV, are being requested in natural and/or cultural history, folklore, archeology, geography, other natural, physical and social sciences, and the humanities. Proposals must be received no later than December 1, 1994, and include a 250-400 word abstract. Mail to Chief of Interpretation, National Park Service, New River Gorge National River, P.O. Box 246, Glen Jean, WV 25846. For more information, call Park Headquarters, 304-465-0508.

Historic Preservation Program

The Goucher College Center for Continuing Studies, in cooperation with The National Park Service, The DC Preservation League, and the Historical Society of Washington, DC, will be offering historic preservation evening classes in Washington in the Fall of 1994.

The program, now in its third year, will enable participants to develop skills to work effectively in preserving our heritage, whether in restoring a home, understanding multiculturalism and ethnic heritage in revitalizing an inner-city neighborhood, serving on a commission or board, or working in a field ancillary to historic preservation. For more information, contact the Center for Continuing

Studies, Goucher College, 1021 Dulaney Valley Road,

Baltimore, MD 21204-2794; 410-337-6200, or 1-800-697-4646.

AIC Conference

An examination of ethical issues confronting conservators and how to resolve them will highlight the annual conference of the 23rd American Institute for Conservation of Historic and Artistic Works (AIC), to be held June 6-10, 1995, in St. Paul, MN. The conference, entitled, Ethics in Conservation: The Dilemmas Posed, will be preceded by a symposium, Gilded Metal Surfaces, on June 4-6.

For more information and registration materials, contact AIC, 1717 K Street, NW, Suite 301, Washington, DC; Phone: 202-452-9545, Fax: 202-452-9328.

Historic Curatorship Program

The Historic Curatorship Program, administered by the Massachusetts Department of Environmental Management (DEM), is an innovative leasing program designed to promote private support for endangered public properties. With several historic structures in disrepair and with a lack of funding, DEM, under the Historic Curatorship Program, will enter into long-term leases with private curator/tenants in return for their investment in rehabilitating, occupying, and maintaining these endangered properties. To become a curator/tenant under the program, individuals or organizations must submit a proposal to DEM for competitive review. Proposals must detail restoration plans and a re-use concept, as well as financial and other qualifications for tenancy.

For a list of properties and more information, contact Patrice Kish, Program Manager, Historic Curatorship Program, Massachusetts Department of Environmental Management, 100 Cambridge Street, Room 1404, Boston, MA 02202; 617-727-3160, ext. 577.

Historic Masonry Symposium

A symposium on preservation treatments for historic masonry will be held November 11-12, 1994, in New York City. The two-day symposium will provide participants with the latest information on the suitability of consolidants, coatings and water repellents for the treatment of historic masonry. The symposium brings together specialists from North America and Europe to discuss appropriate uses and special care that must be taken in treating historic masonry. The symposium is sponsored by the NPS and the Historic Preservation Education Foundation and the Association for Preservation Technology/New York Chapter.

For registration information, write to Historic Masonry Symposium. P.O. Box 77160, Washington, DC 20013-7160, or call the Preservation Assistance Division of the National Park Service at 202-343-9578.

Historic Properties Owners Brochure

The Interagency Resources Division of the National Park Service has prepared a brochure entitled, *My Property is Important to America's Heritage—What Does that Mean?* Many answers to questions for owners of historic properties are provided in this informative brochure. To receive a free copy, contact Interagency Resources Division (413), National Park Service, P.O. Box 37127, Washington, DC 20013-7127; 202-343-9536.

Architectural Fellowship Available

The Richard Morris Hunt Fellowship, sponsored by the Friends of Vieilles Maisons Françaises, Inc. and The American Architectural Foundation, offers an intensive six month work/study program that provides state-of-the-art immersion into the latest historic preservation techniques and practices. To realize the fellowship goals and foster a meaningful exchange of ideas between the respective countries, American and French architects share in the architectural heritage by traveling to the host country in alternating years. The recipient of the 1995 Fellowship will be a U.S.A. resident selected from registered architects who are members of The American Institute of Architects (AIA) and pursuing a career in historic preservation.

For information on the fellowship requirements, contact Mary Felber, Director, AIA/AAF Scholarship Programs, 1735 New York Avenue, NW, Washington, DC 20006; 202-626-7511.

NPS Clearinghouse Inventory List

An inventory listing of all objects in the NPS Clearinghouse will be published in October 1994. The listing will include names, dates, and conditions for the approximately 1,500 objects remaining in the Clearinghouse museum collection. All of these objects are available for outgoing loan, transfer to other NPS units or exchange with non-NPS institutions or individuals. The objects will also be available for transfer to non-NPS institutions if an amendment to expand NPS deaccessioning authority is passed by Congress. The Clearinghouse is located in Harpers Ferry, WV and is part of the NPS Curatorial Services Division of the Washington office. The majority of the collection consists of 19th to mid-20th-century history objects. The inventory will be sent to all NPS units and regional offices and all non-NPS museums and individuals on the Clearinghouse Classifieds mailing list.

To receive a copy of the inventory, contact the NPS Clearinghouse at the Bombshelter, Harpers Ferry, WV 25425, or phone Kathleen Byrne, 304-535-6202.

Historic Hostels Booklet Available

Hosteling International-American Youth Hostels (HI-AYH) has 27 historic buildings that have been renovated, restored and adapted for use as hostels which are inexpensive accommodations for travelers of all ages. HI-AYH has published a booklet, Historic Hostels, which gives the background of several historic buildings and how they became hostels affiliated with HI-AYH. The booklet is available for $3.00, which includes postage and handling. Contact Hosteling International-American Youth Hostels, Dept. HH, 733 15th Street, NW, Suite 840, Washington, DC 20005; 202-783-6161.

Early New England Architecture Symposium

The Society for the Preservation of New England Antiquities (SPNEA) will sponsor a one-day symposium titled, "Early New England Architecture" on October 15, 1994, at the Museum of Our National Heritage in Lexington, MA. The symposium will honor the significant contributions of Dr. Abbott Lowell Cummings to the scholarship of New England architecture and material culture over the past four decades.

For registration information, contact the Society for the Preservation of New England Antiquities, 141 Cambridge Street, Boston, MA 02114; 617-227-3956.

Position Available

President, United States Committee, International Council on Monuments and Sites. US/ICOMOS is seeking an experienced, recognized leader in the field to head the international historic preservation organization, located in Washington, DC, beginning in January 1995.

For a job description and other information, write to US/ICOMOS, 1600 H Street, NW, Washington, DC 20006.

Advisory Council News

The regulatory reform process at the Advisory Council on Historic Preservation approved in concept a new version of "Protection of Historic Properties" (36CFR Part 800). The regulations govern the Section 106 historic preservation review process, designed to protect historic properties from unnecessary harm due to federal actions.

Three new members of the Council have been appointed by President Clinton: Council Vice Chairman Stephen B. Hand, director, Vieux Carre Commission, New Orleans, LA; Hon. Emmanuel Cleaver, III, Mayor of Kansas City, MO; and William Tallbull of the Northern Cheyenne Tribe, Busby, MT.

*(**Bulletin**—continued on page 40)*

(*Bulletin—continued from page 39*)

Classical Design Event

A two-day event of lectures, workshops, demonstrations, and walking tours titled, "House, Garden, Interior: Creating the Classical Residence Today," will be held October 29-30, 1994, in New York City.

For more information, write Classical Residence Seminar, c/o Traditional Building Magazine, 69A Seventh Avenue, Brooklyn, NY 11217, or call the Seminar Coordinator at 718-636-0788.

Archeology and History Meetings

In response to needs expressed by National Park Service (NPS) archeologists and curators, the Curatorial Services Division of the NPS has established two discipline groups to advise the Division on matters related to the curation and documentation of NPS archeological and historic museum collections.

The two groups are the Archeology Working Group and the History Cataloging Advisory Committee. Members of these groups were selected for their knowledge and expertise in the fields of archeology and history from parks, centers, and regional offices within the NPS.

Members of the Archeology Working Group and the History Cataloging Advisory Committee met in September to discuss discipline specific needs related to the development of the next version of the Automated National Catalog System (ANCS).

For more information, contact Jill K. Harris, Curatorial Services Division, National Park Service, Harpers Ferry, WV, 304-535-6202. A report on these meetings will appear in our December issue of *CRM*.

AIC Membership Director Available

The 272-page directory of the American Institute for Conservation of Historic and Artistic Works (AIC) is available for sale ($53) from AIC, 1717 K St., NW, Suite 301, Washington, DC 20006. For more information and a complete listing of AIC publications call 202-452-9545.

Jamestown Lecture Series

The annual "Preservation & Exploration in the Shadow of John Smith" lecture series is scheduled for Oct. 6, Nov. 3, and Dec. 1, at the National Park Service's Jamestown Visitor Center, Jamestown, VA. This year, the Association for the Preservation of Virginia Antiquities (APVA) brings together leading authorities on historical archeology and 17th century colonial American history for presentations on archeological work at the Virginia Company of London and Plymouth's settlements at Jamestown in Virginia and Fort S. George in Maine and on-going research on the development of Jamestown in the 17th century. For ticket information, call 804-229-0412. The lecture series is sponsored by the Virginia Foundation for the Humanities & Public Policy. The APVA is a non-profit preservation organization founded in 1889 and dedicated to preserving and interpreting real and personal property related to the heritage of Virginia. The APVA jointly administers Jamestown with the NPS.

First Staff Members Selected for National Center for Preservation Technology and Training

The Executive Director of the National Center for Preservation Technology and Training, John Robbins, has announced the selection of the initial professional staff for the new Center in Natchitoches, LA. Mary Carroll joins the Center from the Central Arizona Project Repository in Tucson—an archeological repository serving federal and Arizona state agencies—and will be responsible for the Center's information and technology transfer activities. Frances Gale comes from a career in preservation research and product development for universities and private industry. At the Center, Ms. Gale will handle the training aspect of the Center's mission. Mark Gilberg joins the Center as a conservation scientist and will be responsible for the research aspect of the Center's mission.

The National Center was created by Congress to coordinate and promote preservation research, distribute information, and provide training in preservation skills and technologies.

For further information concerning the Center, contact John Robbins at 601-234-4994.

Correction

CRM, Volume 17, No. 5, Bulletin Board, announced the Paleo-Indian National Historic Landmark Theme Study, but erroneously stated that the project was scheduled for completion in September 1994. The project is projected for completion in either FY 1997 or FY 1998; it is the feasibility study that was scheduled for completion in September. For more information, contact Robert S. Grumet, Project Coordinator, Cultural Resource Planning Branch, P.R.P., Mid-Atlantic Region, National Park Service, 2nd & Chestnut Streets, Rm. 251, Philadelphia, PA 19106-2878.

Printed on recycled paper

CRM

VOLUME 17 • NO. 8
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