CRM

VOLUME 15 • NO. 4

1 9 9 2

This Issue

Interpreting Slavery

Interpretive specialist Paul Ghioto and Kingsley site supervisor Brian Peters tell the story of slavery at a sea island plantation

pg. 6

Taking Off at Gateway NRA

Interpretation chief Jeanette Parker and public affairs officer Manny Strumpf discuss Floyd Bennett Field's importance in American aviation history

pg. 8

Managing Resources

NPS associate regional director Rick Smith describes his region's efforts to coordinate all disciplines

pg. 10

Reaching the Children

CRM specialist Sylvia Flowers reports on the creation of a Discovery Lab at Ocmulgee National Monument

pg.12

Storing Museum Collections

Museum specialist Donald Cumberland provides an in-depth analysis of museum storage cabinets in a special supplement to this issue.

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

Forging a National Register Multiple Property Nomination: Pennsylvania Iron Furnaces and Steel Mills

William Sisson

In 1989 the Bureau for Historic Preservation, Pennsylvania Historical and Museum Commission, which is Pennsylvania's historic preservation office, began nominating iron and steel industry resources to the National Register of Historic Places. Iron furnaces and steel mills formed the heart of one of the state's most important industries, and they are among the most endangered historic resources in Pennsylvania. The Bureau for Historic Preservation chose to nominate these resources as a multiple property submission. The multiple property format has greatly aided the Bureau for Historic Preservation in evaluating which furnaces and mills are significant and worthy of preservation.

The Bureau for Historic Preservation assembled a staff industrial survey team in 1989 to prepare the multiple property submission in two parts: writing the National Register multiple property documentation form dealing with iron and steel resources in general; and surveying resources and preparing National Register registration forms for individual properties. Bruce Bomberger and this author wrote most of the form. Part of this form covers major trends in the technological, business, labor and community evolution of the industry from 1716 to 1940. This narrative history also places resources in state and national contexts, analyzing how they have state or national significance. The multiple property documentation form also describes the types of iron resources found in the state, including iron furnaces and ancillary production buildings, and iron plantation buildings such as houses, stores,

(continued on page 3)

Carrick Furnace, with the blowing engine to the left, the iron furnace stack in the middle, and the boilers to the right. Photo by Diane Reed, Pennsylvania Historical and Museum Commission, 1990.

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

CRM

VOLUME 15 • NO. 4

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

Director
James M. Ridenour

Associate Director
Jerry L. Rogers

Editor
Ronald M. Greenberg

Production Manager
Karlota M. Koester

Advisors

Joan Bacharach
Museum Registrar, NPS

Randall J. Biallas
Historical Architect, NPS

John A. Burns
Architect, NPS

Harry A. Butowsky
Historian, NPS

Pratt Cassity
Acting 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

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

Juliette Tahar
Writer-Editor, NPS

Contributing Editors

Betsy Chittenden
Information Management Coordinator, NPS

Bruce Craig
Cultural Resources Coordinator National Parks and Conservation Association

Consultants

Mary V. Maruca
Editor, NPS Courier

Michael G. Schene
Historian, NPS

Kay D. Weeks
Technical Writer-Editor, NPS

Contents

Features

Forging a National Register Multiple Property Nomination: Pennsylvania Iron Furnaces and Steel Mills 1
William Sisson

The Farm Creek Section in Central Illinois– Participation in the Geology NHL Theme Study 4
Ron Deiss

Interpreting Slavery—The Kingsley Plantation Example 6
Paul Ghioto
Brian Peters

Gateway NRA's Floyd Bennett Field: A Cultural Resource 8
Jeanette Parker
Manny Strumpf

Resources Management– An Interdisciplinary Approach 10
Rick Smith

Something for the Children: Ocmulgee National Monument's Discovery Lab 12
Sylvia B. Flowers

Federal and State Shipwreck Management in the U.S. 13
Michele C. Aubry

Departments

Washington Report 18
Capitol Contact
Bruce Craig

Preservation Resources 18
Book Review
Barbara Beroza

Information Management 19
Computer Mapping
National Register Properties
Bonnie Burns
Allison Johnson

Viewpoint 19
Archeology and the Conservation Ethic: Another Perspective
Lawrence E. Weigel

Bulletin Board 20

Forging a National Register Multiple Property Nomination: Pennsylvania Iron Furnaces and Steel Mills

(continued from page 1)

churches, and farm buildings erected to support work forces at often isolated iron furnaces. The form specifies the areas of significance and National Register criteria under which iron industry resources can be listed. In addition, it defines the levels of integrity these resources must have in order to be listed. Setting integrity thresholds was particularly important for historic archeological sites, since such sites can divulge considerable information about the iron industry.

Diane Reed of the industrial survey team investigated individual iron industry resources and prepared National Register registration forms for eligible properties. She began by reviewing information on iron furnaces and plantations previously listed piecemeal on the National Register, researching primary and secondary sources, and interviewing people knowledgeable about iron industry sites in various regions of the state. She composed a list of 29 iron resources which she visited and for which she completed survey forms, including narrative histories and descriptions, site plans and photographs. Bureau for Historic Preservation staff reviewed the survey forms and found that 22 appeared to be eligible for listing in the National Register. Seven properties were determined not eligible due to lack of integrity or significance. The staff's conclusions concerning eligibility were incorporated in the writing of the multiple property documentation form, as was information from the survey forms. Reed then completed National Register registration forms for the 22 eligible resources. In 1991 these nominations and the multiple property documentation form were approved by the state review board, and the nominated resources were listed on the National Register.

Stack with original heat exchanger, Eliza Furnace (c. 1846). Photo by Diane Reed, Pennsylvania Historical and Museum Commission, 1989.

The listed properties run the gamut of iron furnaces and plantations that once operated in Pennsylvania. They include the Robesonia Furnace Historic District in Berks County, which was nominated as representative of iron plantations in southeastern Pennsylvania, for its sophisticated plantation architecture, and as an archeological site that provides information on iron manufacturing. Begun in 1794 and operating until 1927, this iron plantation contains 19th century houses and other buildings featuring high-style architecture seldom found on plantation buildings elsewhere in Pennsylvania. Although the manufacturing facilities were demolished, the remaining building foundations and surface artifacts offer valuable information on how iron was produced at Robesonia. The Carrick Furnace in Franklin County in south-central Pennsylvania was listed on the National Register for its association with the westward movement of the iron industry in Pennsylvania, and as an outstanding example of later 19th century iron furnace technology. Unlike any other furnace in Pennsylvania, the boilers and steam-powered blowing engine, which blasted hot air into the furnace to help smelt iron, survive at Carrick Furnace.

The Bureau for Historic Preservation chose to nominate these resources as a multiple property submission for several reasons. It had determined by 1989 that the Pennsylvania iron and steel industry was highly important in state and national history. A historic context on Pennsylvania industry completed by staff determined that iron and steel manufacturing was one of the five most important industries in the state's history in terms of the number of employees and the value of goods produced.[1] The state's iron and steel furnaces were also critical to the development of the national industry. Pennsylvania led all other states in iron and steel production from the mid-18th through the mid-20th century, and many of the industry's important technological innovations and developments in labor-management relations originated in Pennsylvania. The Bureau found the multiple property documentation form to be an excellent way of documenting the complex and important history of this industry.

The Bureau for Historic Preservation undertook a multiple property submission because many iron and steel industry resources are endangered, and the Bureau and other organizations must set priorities on which resources should be preserved. Scores of iron furnaces have already disappeared, and many that remain are slowly crumbling due to neglect. Since the mid-1980s, steel mills have closed, particularly in the Pittsburgh area, and some mills covering hundreds of acres have been completely demolished. The America's Industrial Heritage Project and the Steel Industry Heritage Task Force, both industrial heritage preservation programs at work in southwestern Pennsylvania, have been trying in recent years to save endangered iron and steel industry resources. Other individuals and historical societies elsewhere in Pennsylvania are involved in similar efforts. Given the scores of remaining historic resources and limited funding available, priorities must be set as to which resources most merit preservation. The multiple property documentation form already completed provides a way of assessing the significance of iron industry resources and designating which properties are worthy of preservation. The Bureau plans to add to the form the types of steel industry resources found in the state, and the

(continued on page 4)

The Farm Creek Section in Central Illinois– Participation in the Geology NHL Theme Study

Ron Deiss

In 1990, the CRM Bulletin (Vol. 13, No. 1) contained an article by Harry A. Butowsky on the National Park Service's new Geology National Historic Landmark (NHL) Theme Study. The article requested information on sites which influenced the history of the geology in the United States. As a result of this request many sites were recommended for further study in the geology theme study. One of these sites is the Farm Creek Section in East Peoria, IL, located on land operated and managed by the Rock Island District of the U.S. Army Corps of Engineers. The Farm Creek Section was also listed in the National Register of Historic Places on February 6, 1992. The Corps' active role in documenting the significance of this site reflects its commitment to preserving and protecting historic properties under its jurisdiction.

For over 95 years geologists have studied the Farm Creek Section revealing information which has influenced the development of historical geology. The knowledge gained from the study of this site not only contributes to our understanding of the natural history of the earth but also helps us to understand the development of the science of historical geology and its important role in American History.

This is another in our continuing series of articles that will examine the educational, interpretive and scientific potential of our national parks and other historic sites. Readers of CRM are invited to submit contributions to this series to Harry Butowsky, CRM, (400), National Park Service, P. O. Box 37127, Washington, DC 20013-7127.

The Farm Creek Section is known to geologists today as a unique property significant in the development of many important geological concepts relating to the study of continental glaciation. The section is located within the Farmdale Reservoir in Tazewell County, Illinois. This reservoir was constructed by the Corps of Engineers to prevent damage from flooding as part of the Farm Creek Flood Control Project.

Archeologically, the Farmdale Reservoir contains much evidence of the prehistoric occupants who inhabited the rough topography left by the last glaciers. A number of prehistoric campsites have been under study for over a decade. During a preliminary survey the significance of the Farm Creek Section was documented by Western Illinois University, Macomb, in *A Cultural Resources Overview and Reconnaissance Survey of Two Dry Reservoirs, Tazewell County, Illinois*. Authors Lawrence A. Conrad, Mark E. Esarey, and J. Joseph Alford recommended the Farm Creek Section for nomination to the National Register of Historic Places due to its importance to Pleistocene studies. They concluded that its significance

---

Forging a National Register Multiple Property Nomination: Pennsylvania Iron Furnaces and Steel Mills
(continued from page 3)

National Register criteria and integrity thresholds that must be met in order to designate steel resources as worthy of preservation.

The Bureau for Historic Preservation also wanted to provide a broad history of Pennsylvania's iron and steel industry for the general public. A number of histories had been written about specific iron furnaces or steel mills, and about the technological, business or labor history of the industry. But no history adequately synthesized these various subjects into a broad, interpretative whole. The Bureau hoped to provide this history and distribute it to the general public. In this way citizens throughout the state could learn the full history of an important industry from their past, and the need to preserve vanishing historic resources. The Bureau for Historic Preservation plans to publish the historical narrative section of the multiple property documentation form for the general public. Thus the multiple property format enables the Bureau to identify and assess iron and steel industry resources, and educate the general public about their history and importance.

Double workers' house (c. 1845). Robesonia Furnace Historic District. Photo by Diane Reed, Pennsylvania Historical and Museum Commission, 1990.

[1]This context, *Made in Pennsylvania: An overview of the Major Historical Industries of the Commonwealth*, was written by Bruce Bomberger and William Sisson and published in 1991 by the Pennsylvania Historical and Museum Commission.

William Sisson is the National Register Coordinator for the Bureau for Historic Preservation, Pennsylvania Historical and Museum Commission.

This group of distinguished geologists was photographed by H. Foster Bain on May 7, 1898. The photo is a classic and rare view of famous historical and glacial geologists who influenced contemporary scientific theory. From left to right: S.W. Beyer (1865-1931), J.A. Udden (1859-1932), T.C. Chamberland (1843-1928), Samuel Calvin (1840-1911), and Frank Leverett (1859-1943). From original photo at the University of Michigan.

as an interesting and valuable public property should be highlighted. The Corps subsequently contracted with historical geologist Joanne Klussendorf of the Department of Geology, University of Illinois at Champaign-Urbana to complete the National Register nomination form. The site was listed in the National Register because of its use in the formulation of basic, broad geologic concepts, the presence of intact stratigraphic data of scientific importance, and because of its association with prominent geologist Frank Leverett. The Corps and the National Park Service also recognized the National Historic Landmark potential of the site and it was included in the geology theme study.

The Farm Creek Section has changed very little since it was first discovered by Frank Leverett in 1897. The section is approximately 100 feet high and 225 feet long, with trees covering the top and sloping sides. It is located in an erosional bank cut on the south side of Farm Creek which reveals a stratigraphic record spanning nearly 65,000 years of the Pleistocene Epoch of the Quaternary Period (Ice Age) of Earth history.

Frank Leverett

The identification and study of the Farmdale Creek Section is the direct result of the work of Geologist Frank Leverett, one of the most important scientists of Pleistocene glaciation. At the time of his death in 1943, Leverett was regarded as one of the greatest glacial geologists of his time, and possibly one of the greatest of all time and in all countries. Most historical geologists agree that Leverett contributed more than any other person to our knowledge of Midwestern glacial geology.

Leverett was born in Denmark, IA on March 10, 1859. He graduated with a Bachelor of Science degree from Iowa State College of Agriculture and Mechanic Art (now Iowa State University) in Ames in 1885. He was soon hired by the U.S. Geological Survey where he mapped and described more glacial features over a wider geographical area than anyone previously. During his tenure at the U.S. Geological Survey, Leverett authored a greater volume of Survey publications than any other member since its founding. Among these was his classic monograph on Illinois glacial geology, *The Illinois Glacial Lobe,* in which he first described the Farm Creek Section. This publication contributed more to the understanding of the Quaternary history of Illinois than any other geological publication.

Scientific Significance in Historical Geology

By the late 1890s, the concept of multiple glaciations had been largely accepted by the scientific community, although a controversy over the importance of fluctuations between ice advance and retreat divided the geology profession. One side of the controversy held that fluctuations were minor and short lived, whereas the other side believed that intervals of ice retreat were prolonged and widespread, separated by episodes of glaciation. The Farm Creek Section contained ample evidence for two glacial and two interglacial stages or warming periods which helped to resolve this dispute in favor of prolonged periods between glacial advances or epochs.

The recognition of multiple glaciations led to a formal stratigraphic classification of glacial and interglacial stages, half of which were named by Leverett, including the Peorian stage. Leverett also provided fundamental evidence for an interstadial stage, determined to be a short retreat of glacial movement. Leverett discovered, through fossil spruce and pine pollen recovered from the Farm Creek Section, that interstadial periods could be distinguished from interglacial periods by differences in vegetation reflecting climatic variations and buried soil horizons.

Leverett's discovery contributed significantly to determining the origin of loess. Loess is an unconsolidated fine silt that covers much of the Midwest and was first described as a lake deposit in 1840 by pioneer geologist David Dale Owen. Although evidence for windblown origins were proposed early as 1877, North American geologists continued to accept Owen's views on loess. Leverett believed that at least some loess was wind-derived, but much of the research that established the origins of loess was conducted by Morris M. Leighton in the 1920s and 1930s. Although numerous exposures became available to Leighton as the result of a surge in road-building for automobiles, he analyzed the well studied Farm Creek Section documenting that loess was indeed windblown.

Since the time of its discovery in 1897, no Quaternary exposure in Illinois has attracted more attention from glacial geologists. The Farm Creek Section remains as an important type and reference section for numerous rock-, time-, and soil-stratigraphic units. It presently serves as the type section for the Farmdalian Substage, Robein Silt, Morton Loess, and Farmdale Soil. These type sections are important artifacts of past studies which influence the progress of future research. Thus, Farm Creek Section continues to be important in clarifying and refining basic

(continued on page 7)

Interpreting Slavery–The Kingsley Plantation Example

Paul Ghioto
Brian Peters

Located in the northeast section of Jacksonville (Duval County), FL, the Timucuan Ecological and Historic Preserve was established in 1988 to protect important wetlands and historic and prehistoric sites in the St. Johns River Valley. Approximately 1,200 of 46,000 acres within the authorized boundary have been acquired and the preserve currently has three operational units: Fort Caroline National Memorial, established in 1953; the 600-acre Theodore Roosevelt Area; and, as of October 1, 1991, the 23-acre Kingsley Plantation.

Kingsley Plantation, located on Fort George Island, has a long, significant history. The island and associated sites include the stories of the Timucuan Indians—namesake of the preserve— military conflict, missionary settlement and frontier life of Spanish, French, English, and American settlements spanning more than four centuries. One of the most significant periods in this story is the plantation era.

Zephaniah Kingsley, for whom the site was named, was one of several owners of the island. John McQueen was first granted the island in 1791 by the Spanish government, followed by John Houstoun McIntosh (1804-1813), Zephaniah Kingsley (1813-1839) and his nephew, Kingsley Beatty Gibbs. Zephaniah Kingsley operated the plantation the longest, spanning the transfer from Spanish to U.S. territory. In public life Kingsley was active in both territorial and local governments. Also known for his writings on what he called the patriarchal system of slavery, Kingsley believed that slavery was necessary for the plantation system to survive. In his writings he advocated more humane treatment of slaves, as well as granting full rights to free blacks. Little is known of his private life; however, documentation indicates that he had an African wife, originally purchased as a slave, and that he acknowledged his 10 children by her and two black mistresses. In later years he acquired for his family a plantation in Haiti where his descendants could live "governed by some law less absurd than that of color."

Although Kingsley was unique in many ways, day-to-day operations were typical for a sea island plantation. These low country plantations, stretching from South Carolina to Florida, operated under a system of slave labor referred to as the "task system." A task was a well-defined, easily identified quantity of work, frequently a quarter acre of field work or a comparable amount of piece work. When the task was completed, often with daylight remaining, slaves were permitted to work in their gardens or use their skills in crafts. Their yield of produce or craft work could then be sold through the planter. Throughout the coastal region the task system allowed underground economies to develop in which property could be accumulated by slaves. In turn, this provided slaves with some control over their lives, accumulating resources that could be used to purchase their freedom. Today, Kingsley Plantation includes two plantation houses, one of which may be 200 years old; a tabby, brick and frame barn; and the remains of 23 of the original 32 tabby slave cabins.

An interpretive plan for Kingsley Plantation is under development as well as a General Management Plan for the preserve. Park staff have identified four primary interpretive themes for the site. They include the continuum of history on Fort George Island; the life and times of Zephaniah Kingsley; the plantation and its operation; and slavery, the peculiar institution. What has become

The original plantation house overlooks the salt marshes of the Timucuan Preserve. The widow's walk may have provided a view of the plantation fields. Photo by Ed Kanze.

Twenty-three tabby slave cabins remain on the Kingsley Plantation site. Most are two-room structures with fireplaces and windows. Photo by Ed Kanze.

clear through the planning process and the first few months of daily operations is that interpreting slavery has become the biggest operational challenge and opportunity at Kingsley Plantation. The National Park Service has a large amount of experience interpreting people and places, such as Zephaniah Kingsley and Fort George Island. But it lacks experience in interpreting slavery, a broad social institution which is often misunderstood and creates a strong and varied emotional response from the visiting public.

The park has taken measures to ensure that all site interpreters are sensitive to these issues and thoroughly trained in techniques for presenting balanced interpretation and knowledge of the historical documentation of the site. The recent NPS training course, "Developing African American History Interpretive Programs," conducted at the Mather Employee Development Center, discussed a number of factors affecting interpretive programs. The comfort level of both the interpreter and visitor will play a part in good communication. Ignorance of the subject, attitudes and stereotypes play a part in the reception of the message, requiring that interpreters be very clear in their language. Personal agendas on the part of the interpreter will hurt credibility, reduce the effectiveness of the program and must be avoided. In short, the information presented must be based on solid historical evidence and presented without assigning personal values or opinions, allowing the public to draw their own conclusions. Interpreters will recognize these features as common to all interpretive programs, and ultimately there should be no distinction between African American history programs and standard interpretive programs.

At Kingsley Plantation research is ongoing to establish a firm foundation of information. Park staff are gradually shifting away from interpretation traditionally done at the site to programs emphasizing the slavery theme. By presenting the facts and primary source material as they are known, and maintaining flexibility to adjust as new information is discovered, site interpreters are able to use sound interpretive techniques to present the issue professionally and with sensitivity.

All interpreters, historians and researchers are invited and encouraged to become a part of this new and exciting effort by forwarding to the Timucuan Preserve any and all relevant materials, suggestions and criticisms which may provide insight or assistance.

Zephaniah Kingsley and the plantation are, simultaneously, unique and typical. Combined, they give the National Park Service the tools to tell an important, but difficult and challenging part of America's history. Solidly based interpretive themes and sensitive management will allow creative interpreters to place the site in a greater cultural context while describing daily activities of the people who lived and worked there.

Although it is but a short distance from the developed areas of Jacksonville, Kingsley Plantation is far away in spirit from the clutter of the 1990s. The isolated and tranquil setting allows visitors to travel back in time to the early 19th century and discover a portion of that most peculiar institution—slavery.

Paul Ghioto is the interpretive specialist and Brian Peters is the site supervisor at the Kingsley Plantation.

The Farm Creek Section in Central Illinois– Participation in the Geology NHL Study

(continued from page 5)

geologic concepts which evolve as new techniques and ideas are presented.

Throughout the school year, class trips are scheduled by universities so students can view and study the Farm Creek Section. This first-hand analysis often includes an appreciation for the setting, such as the sylvan banks of Farm Creek, where the rough moraine topography has changed little since 1897 when Leverett walked the bluffs. It is apparent that most visitors view the Farm Creek Section as a monument to Leverett and his significant contributions to ice age geology. The Corps continues to research the Farm Creek Section, focusing on written and photographic documentation. This will provide the Corps with the information to protect and manage the site for future generations interested in the geology of glacial history.

Ron Deiss is an archeologist in the Environmental Analysis Branch, Rock Island District, Army Corps of Engineers, Rock Island, IL.

Gateway NRA's Floyd Bennett Field: A Cultural Resource

Jeanette Parker
Manny Strumpf

A recent issue of CRM (Vol. 15, No. 2), which focused on our aviation heritage, overlooked one of the Nation's significant aviation sites, Floyd Bennett Field in New York. The article below discusses how New York City's first municipal airport, an important Naval Air Station during World War II, and scene of many historic and record-breaking flights, has been developed and transformed into a major cultural resource by Gateway National Recreation Area.

Located in the heart of America's largest metropolitan area, Gateway National Recreation Area touches the lives of upwards of 20 million Americans. "As Gateway marks the 20th anniversary of its 1972 enabling legislation," says General Superintendent Kevin C. Buckley, "we must not lose sight of the purpose of Gateway, to make the National Park Service experience available and accessible to the millions of urban dwellers who live in and around this city. For millions of these residents, Gateway National Recreation Area means fun, adventure, and a chance to learn about the fragile balance between humans and their environment," he points out. Gateway's enabling legislation combined more than 26,000 acres of land and water in three boroughs of New York City and at Monmouth County in New Jersey into America's pilot national recreation area in a major metropolitan region.

This massive park at the entrance to New York Harbor included historical treasures and natural resources that the City of New York, the State of New Jersey, and the Department of Defense could not or did not wish to further manage. Among the historic treasures to come under the Gateway umbrella was Floyd Bennett Field, a five-minute drive from the Belt Parkway in Brooklyn, NY.

Floyd Bennett Field was dedicated on May 23, 1931. For the next 10 years Floyd Bennett Field struggled to lure commercial business from its major competitor, Newark Airport. Mayor Fiorello LaGuardia failed in his attempts to secure a lucrative air mail contract and the airlines, consequently, offered limited passenger service.

However, the field's long concrete runway—believed to be one of the longest in the world—the favorable weather conditions, and lack of obstructions made it an ideal place for test flights. Floyd Bennett Field provided the stage for more than 40 record-breaking flights. In 1932, James Haizlip flew from Los Angeles to Floyd Bennett Field in 10 hours and 19 minutes, a west to east transcontinental speed record. A much more arduous flight took place the following year when Wiley Post became the first man to fly around the world—solo—in 7 days, 18 hours and 45 minutes. Russell Boardman and John Polando flew from Floyd Bennett to Instanbul nonstop in 49 hours and 20 minutes. Other aviation greats, including Howard Hughes, Amelia Earhart, Jacqueline Cochran, and Douglass Corrigan, used the historic runway. Corrigan's flight from Brooklyn to Ireland, although the flight plan indicated a flight to California, resulted in his lifelong nickname of "Wrong Way" Corrigan. In more recent years, military airmen and airwomen, including Astronaut, now U.S. Senator John Glenn, were stationed at the Brooklyn site.

The opening of New York's LaGuardia Airport in 1939 seriously depleted Floyd Bennett Field of commercial business. Still, New York City's Police Aviation Unit

Floyd Bennett Field in the 1930s. Photo courtesy Gateway National Recreation Area.

Floyd Bennett Field, take-off and landing point for aviator Charles Lindbergh. Photo courtesy Gateway National Recreation Area.

found an ideal home in one of the old hangars where it continues to operate today. New York was the first city to have such an aviation unit in its police department. Today, New York City's familiar blue and white police helicopters from Floyd Bennett Field are used for rescues, emergency transport, traffic control and myriad other functions in all five boroughs.

In the 1930s as well, the U.S. Coast Guard secured a long-term lease from the city for a 10-acre plot on the eastern portion of Floyd Bennett Field. The Coast Guard Air Station was completed in 1938 and the principal buildings remain largely intact. The 1972 Congressional enabling legislation for Gateway precluded the Coast Guard Air Station from National Park Service administration.

Although the Navy had a reserve unit in one of the eight hangars since the field's dedication in 1931, the tense atmosphere in Europe spread to this country and the Navy's presence on Floyd Bennett Field grew significantly. In 1939, as German U-Boat activity increased, the Navy built a seaplane base as a defense measure and by 1940 occupied half of the hangars. The following May the Navy leased the field from New York City and commissioned it as the New York Naval Air Station. The field was bought from the city in 1942 and was tripled in size with fill pumped from Jamaica Bay. Numerous runways, barracks and shops were constructed and the Naval Air Station became one of the busiest airfields during the Second World War. Thousands of pilots were trained and men and equipment were sent to the European Theatre of Operations. After World War II, Floyd Bennett continued to play a prominent role as a Naval Air Reserve Training Station. It was decommissioned by the Navy in 1971, one year before Gateway's enabling legislation.

When Gateway was legislated, its focus changed dramatically from aviation to protection and preservation of the resource while the Park Service sought means of converting the runways, buildings and natural areas for other purposes. During the past 20 years, the Park Service has succeeded.

Today, the runways are relatively quiet. The Naval Air Station turned over its miles of concrete runways to become part of Gateway. The vision of the park turned to the thousands of visitors who would come to the field for recreation. The amount of cultural, military, social and natural history lying within the borders of Floyd Bennett Field, as well as its vast open space, opened many possibilities for interpretation.

The richness of the resource was, however, restricted by the limited funding available to renew and rehabilitate its structures. Hampered by a multitude of hangar complexes and support facilities with outdated plumbing and electrical systems and crumbling walls and ceilings, interpretation focused on programs which would be possible without the use of most buildings and centered around the human resources available.

The earliest ideas for interpretation included phases which might be accomplished given various private sector partnerships and other governmental and nongovernmental institutions to provide funding in addition to Gateway's own operating budget. Some of the ideas have succeeded, others are taking off more slowly, and still others have been temporarily grounded until financial conditions improve and outside arrangements are set in place.

What has occurred over the past 20 years, with a tremendous degree of success, is the establishment of a cooperative agreement with the New York City Board of Education to coordinate an environmental study center at Floyd Bennett Field. The center has become an avenue of learning for students, teachers and administrators throughout the five boroughs. Study center programs range from on-site workshops, laboratory sessions, day visits with field walks and activities, overnight camping, and weekend and after school teacher training sessions.

In fact, one of the most innovative and successful programs at Floyd Bennett Field is the overnight tent camping program, the only such program in New York City. Urban children come to Brooklyn, where they trade the hustle and cacophony of city streets for the wide horizons and symphony of native wildlife.

Interpretive programs offered to the general public range in intimacy from small group walks, talks and workshops to major events such as the annual City Gardeners' Harvest Fair, ethnic festivals and sporting events.

The theme of flight continues into the era of the National Park Service. Bird walks offer an exploration of the wild side of the field. A major resource management undertaking has involved a partnership between the Audubon Society, the park and other local conservation groups to recreate a grassland habitat which would enhance the field for animal species dependent on this otherwise dwindling ecosystem.

Kite demonstrations and workshops are offered as part of the general public programming and both entertain and instruct visitors in flight and aerodynamic theory. Under a special use permit, radio-controlled model airplane flyers are allowed space at the end of one runway to log in hours of flight time with their specialized hobbies.

(continued on page 11)

Resources Management–An Interdisciplinary Approach

Rick Smith

During the last decade or so, beginning with the 1980 Threats to the Parks survey, supporters and critics of the National Park Service have subjected our resources management activities to increasing scrutiny. The old attitude of "you're the resources professionals, you make the decisions" is gone. In its place is the demand for public participation in these decisions, a demand legally required by the Historic Preservation Act and the National Environmental Policy Act, and philosophically compelled by the National Park Service's democratic bias that decisions arising from a public discussion of alternatives are almost always superior to those selected by a small group of people, no matter how well qualified.

One of the issues we almost always hear in such forums is that with fiscal and human resources being squeezed by the Nation's budget realities, it is appropriate to think about how we can make our resources management dollars go farther. I think we can do this by beginning to consider resources in ways that are different from our traditional division into natural and cultural resources.

One of the major recommendations from the Service's 75th anniversary symposium was that there be increased communications between the Service's natural and cultural resources specialists. As a member of the resources stewardship working group, I participated in the formulation of this recommendation. I later heard the participants at the Vail conference underscore the importance of the recommendation. For too long, the participants said, the Park Service had compartmentalized its resources specialists. Natural resources folk rarely talked with cultural people, even though the majority of cultural resources activities are an attempt to mitigate the effects of natural forces on cultural resources. What the participants seemed to be calling for was a different approach.

Regional Director John Cook had adopted such an approach some two years before the symposium. He recognized the symbiotic nature of resources management. In an attempt to facilitate communications between natural and cultural resources specialists, he moved all the disciplines under one associate regional director. He also added environmental coordination under that ARD. The resulting organization—anthropology, curation, submerged cultural resources, conservation, history, science and natural resources, the Spanish Colonial Research Center, the Mexican Affairs Office, and environmental coordination—gives structural form to the concept that cooperation and coordination among these functions are necessary for effective resources management leadership in the Southwest Region.

In theory, there are some distinct advantages to this organizational structure. Division chiefs from these diverse disciplines sit down with each other at least twice a month to discuss items of mutual interest and to brief each other on resources issues. They discuss park-specific issues where cooperation between disciplines can save the park time and money. They see ahead of time where cooperation may be able to achieve economies of action. All of them participate in funding decisions that affect the operations of the nine divisions. There is less competition as they can see opportunities for coordinated activity. There is a tendency to share cutting edge technology where there may be cross-over opportunities between disciplines. As with any attempt to look at issues from a new perspective, we have probably been more successful in talking about coordinated strategies rather than implementing them. A pattern, however, is beginning to emerge that indicates that there are almost infinite possibilities for such coordination.

We have recently completed a four-year archeological survey at Bandelier National Monument. We achieved our research design goal of surveying 40% of the park. Using the database developed for the park by the science and natural resources division, the research leader has entered the archeological data on the park's GIS. All management alternatives considered by the park staff can now be arrayed against a comprehensive cultural and natural resources database. If, for instance, the superintendent wishes to relocate a trail, he/she cannot only consider issues such as soil types, elevations, vegetation cover, slopes, and drainage patterns, but also the location of known archeological sites and potential sites that we can predict because of the system's ability to perform relational database functions. This will not, of course, eliminate the need to do a certain amount of ground truthing for resources integrity or compliance purposes. It will allow us to eliminate areas during the planning process which we can determine will have too high a site density to even consider running a trail through. These kinds of databases will certainly aid us during GMP or DCP planning efforts.

The development of the GMP at the newly-established Petroglyph National Monument on the west side of Albuquerque offers a fascinating example of the application of this kind of technology. The GIS for the park will include the UTM coordinates for the most important petroglyphs in the monument. In considering the kind of interpretive trail system to be developed, park planners can lay out trails that make sense from a natural resources and topography point of view. They can also highlight or, perhaps more importantly, avoid significant clusters of petroglyphs. The ability to access this kind of information will allow us to deal more sensitively in our consultations with the Pueblo Indians for whom the petroglyphs have important religious or ceremonial importance. This information will also be extremely important to the protection rangers at the monument. They will be able to design their patrol routes to protect the most significant petroglyphs.

Curation is another area in which our efforts have been enhanced by effective coordination between natural and

cultural resources management specialists. While we have been able to improve artifact storage and display capabilities in the Southwest Region due to the various curatorial funding initiatives, we still have pest problems at several locations. The natural resources specialist who is in charge of the integrated pest management program in the region has assisted the curatorial staff in identifying sources and kinds of infestations and has recommended alternative storage or treatment procedures. When conservation treatment is finished, we can return artifacts to their storage or display locations with the confidence that we have resolved this infestation problem.

The IPM coordinator has also assisted our ruins stabilization program. One of the principal problems in the Southwest Region is the growth of vegetation on the walls of prehistoric and historic rock walls. Not only does this growth make the walls more difficult to interpret, it also produces new avenues for cracking and new routes for water infiltration. The coordinator has been developing a portable instrument that will allow park resources personnel to burn the vegetation off the walls without harming historic fabric or using chemicals which might alter the chemical composition of the fabric itself or cause environmental or health problems.

Our remote sensing capabilities, designed primarily for cultural resources purposes, are beginning to be used by natural resources personnel. Using the high resolution photographs produced during overflights, natural resources personnel can begin to make initial judgments regarding vegetation cover and elevations. We can foresee the time when the plotting of anomalies from our remote sensing could guide natural resources personnel in prescribed fire or fire suppression activities. Beginning with the La Mesa fire in Bandelier in the '70s, it has been increasingly common to assign archeologists to fire line building teams. The data we are considering now could be plugged in during the planning process of prescribed or project suppression activities, making our efforts more proactive.

I have described only a few ways that cooperation and coordination between natural and cultural resources are beginning to make a difference in our region. The question that remains is, is this kind of coordination impossible without the kind of organization that our regional director has put in place? The answer, of course, is no, but I would argue that grouping all the cultural and natural resources under one associate makes such coordination more likely. People who are organizationally separate tend to pursue their separate agendas, not because they are unaware of the benefits of cooperation, but because of the nature of our bureaucratic system. As I understand the recommendations of the 75th anniversary symposium participants, they are saying that the old bureaucratic structures are no longer appropriate for the last decade of the 20th century and beyond. This was the very same point that the 21st century task force made. If we are serious about getting better at what we do—and by better I mean more dedicated to resources preservation and protection and using more cost effective, efficient methods— we need to get real serious about streamlining our organization and enhancing our ability to adopt interdisciplinary approaches to our resources management issues.

Adoption of this approach at the regional level will also force change in Washington. Part of what I heard at Vail had to do with the fact that the resources associates in Washington did not coordinate their activities as effectively as the participants thought appropriate. They did not attribute this to turf protection or any other kind of negative mindset. They simply felt that the myriad responsibilities made coordination difficult. The two associates in Washington are required to deal with one associate regional director in the Southwest Region, not two as in most other regions. I can suggest ways that we plan to use the resources provided by Washington funding sources to accomplish general resources goals, not just the specific natural or cultural resources objectives that may be driving the funding initiatives. If this were the case in other regions, we would be that much closer to implementing one of the major recommendations from Vail.

Rick Smith is the Associate Regional Director, Resources Management for the Southwest Region of the National Park Service.

Gateway NRA's Floyd Bennett Field: A Cultural Resource
(continued from page 9)

Historical interpretation programs—by foot and by bike—trace the history of Floyd Bennett Field from its earliest inhabitants, Native Americans, through its municipal airport and military air station years to its present function as a National Park Service recreation area.

Special programs enhance the theme of flight and are limitless. They include a tribute to black aviators; women pioneers of flight; explorations of the record-breaking flights of Amelia Earhart, Wiley Post and "Wrong Way" Corrigan. The park has recorded oral histories of some of the personalities of the field's earliest days, including Paul Rizzo, founder of Barren Island Airport, forerunner of Floyd Bennett Field. Mr. Rizzo has spoken at park events and has been a willing volunteer to share his memories. Corrigan was interviewed for the park's oral records.

Present-day Floyd Bennett Field is not without powered flight because of the Coast Guard Air Station and New York Police Department, both of which have added dimension to the park's interpretive and recreational programs by providing demonstrations of rescue attempts at special events for the general public.

Floyd Bennett Field has always fostered experimentation and creative thinking. Today it is fitting, therefore, that this historic airport is an integral part of and is headquarters for Gateway National Recreation Area which along with Golden Gate NRA in California was the pilot national recreation area in a major metropolitan region.

Jeanette Parker is chief of interpretation and Manny Strumpf is public affairs officer at Gateway National Recreation Area.

Something for the Children: Ocmulgee National Monument's Discovery Lab

Sylvia B. Flowers

Park superintendent Sib Smith cut the yellow ribbon, ending the 1983 rededication ceremonies for Ocmulgee National Monument's beautifully renovated museum/visitor center. Special guests and other visitors dispersed quickly throughout the building.

I watched a dignified gray-haired gentleman stop to peer into a plexiglas exhibit case. Summoning my entire reserve of nerve, I approached Dr. Charles Fairbanks, prominent Southeastern archeologist, Professor Emeritus, Florida State University—one of my heroes. Dr. Fairbanks, who began his career at the monument almost 50 years ago, had married a young lady from Macon, but their visits to the area were few in recent years.

As casually as possible, I introduced myself, explaining that I'd wanted very much to meet him. He glanced at my gray and green ranger uniform, looked straight into my eyes and said sternly, "Nice to meet you, Sylvia. It's a fine new museum, but there's nothing here for the children." I agreed, noting how unfortunate it was that most of the large number of children who visit on school field trips pay minimal attention as they file past the exhibits.

Discovery Lab. Photo courtesy Ocmulgee National Monument, Macon, GA.

"Do you plan to stay here for awhile?" he asked. I replied, "I hope so." His demeanor softened and he smiled slightly. "Then, do something for the children," he half ordered, half pleaded. We were interrupted by others who wanted his attention.

Over the next months, I thought of his words often. They especially tormented me when less than a year later I was chosen to represent the park at memorial services for Dr. Fairbanks. He'd come back to Macon for the last time. As I stood at his graveside, I knew something must be done to light a spark of interest in Ocmulgee's children; something to encourage a sense of stewardship for their cultural and natural heritage.

I discussed this need for "something" with the superintendent. One Monday morning after he'd taken his visiting grandchildren on a tour of the museum, he challenged me to seriously consider Dr. Fairbank's admonition. "My own kids were bored," he remarked sorrowfully.

The superintendent placed a 46' x 46' mostly unused basement room at my disposal. "We have no funds to develop this project," he warned. "It must be completed with donations and volunteers." Still, he believed it could be done. His enthusiasm, moral support and creative inspiration during the uncertainty of the planning stage gave me confidence and direction.

We convened a meeting of archeologists, educators, and interested lay people to study the problem. The consensus: a "hands-on" facility would be ideal. Their suggestions, followed by brainstorming sessions with anyone who would listen, added many ideas to my file folder of possibilities.

After telephoning other museums, I found that only the Smithsonian Institution and the Royal Ontario Museum in Canada appeared at the time to have children's rooms similar to the still-hazy concept forming in my mind. Generous staff at these great learning centers sent pictures and information which spawned additional ideas. As concept gradually became more concrete, the time came to give it form.

There were no computers at the park and I knew nothing then of computer-aided drafting programs, the wonderful software which now so greatly simplifies making changes to designs as ideas progress. Drawings for the project were done with pen and ruler. After many preliminary sketches and (unfortunately) much wasted paper, the Discovery Lab gradually assumed its final form.

One corner of the room would be devoted to archeology, another to history. The other two corners covered the region's natural environment and Native American arts/crafts/technology. Group activities, such as audio/visual programs, workshops or lectures could take place in the large central area. Custom furnishings would fill each corner and include a carpeted bird effigy platform patterned after the 1,000-year-old original in the park's ceremonial earthlodge; a log "fort/trading post" to double as a puppet stage; an early farm kitchen contrasted with a thatch-covered Indian cooking shed; a treehouse, accessed by a ladder, providing a bird's-eye view of the surroundings.

Designs and specifications were prepared for each element. The room needed a dropped ceiling to hide exposed electrical wires and water pipes. New light fixtures, paint, floorcovering, display shelves, exhibit cases, tables, chairs, pictures, reproduction artifacts, audio/visual equipment were necessary. Feelings of despair sometimes descended upon me as the "needs" list grew longer.

My outlook changed when the first telephone to get a price estimate from a local acoustical ceiling business resulted in an enormous surprise. After I'd explained the project to the owner and told him what was needed, he actually offered to provide both material and labor at no cost.

After this unexpected success, straightforward requests for assistance were directed to other businesses. Amazingly, not one turned me down. Lumber, paint, even nails were donated. A bank and an insurance com-

Federal and State Shipwreck Management in the U.S.

Michele C. Aubry

This article is a reprint of a paper which was presented at the 10th Annual Conference of the Australian Institute for Maritime Archaeology, Adelaide, South Australia, September 1991.

No one knows how many shipwrecks lie in the waters of the United States of America, but the total number is thought to be more than 50,000. Of this number, some five to ten percent are thought to be of historical significance. Some shipwrecks date from the earliest periods of exploration and colonization of North America. A preponderance of the wrecked vessels were used in the 19th and 20th centuries to transport passengers and cargo to ports throughout the United States. Some are wrecks of military vessels that were sunk in battles during the American Revolution, the War of 1812, the Civil War, World War I, and World War II.

Many of the more well known shipwrecks, like the USS *Arizona* and the USS *Monitor*, are located in units of the national park system and in units of the national marine sanctuary system. Thousands of other shipwrecks also lie in state and Federal waters. The first section of this paper describes the legal basis under which shipwrecks in U.S. waters are managed. The second section highlights key elements of shipwreck management programs of the Federal and state governments in the United States. The third section briefly describes the objectives and content of the National Park Service's shipwreck management guidelines, which were issued in 1990. The paper closes with a discussion of what the future may hold for shipwreck management in the United States.

Legal Basis

Nineteen hundred and eighty-eight was a good year for shipwrecks abandoned in U.S. waters. In that year, the U.S. Congress enacted and the President of the United States signed into law a new Federal statute, the Abandoned Shipwreck Act (43 U.S.C. 2101-2106). The primary purposes of the Act are to establish Government ownership over some (but not all) abandoned shipwrecks

(continued on page 14)

Something for the Children
(continued from page 12)

pany gave $500 each. After mention of the Discovery Lab at an off-site program, a civic organization adopted it as their special project for the year and presented a check for $2,500. The park's cooperating association offered to buy chairs and audio "listening stations."

With materials assured, the park's maintenance staff and other volunteers built furnishings, laid floorcovering, and painted the walls on their offdays. Other individuals helped in too many ways to mention. A wonderful spirit of cooperation pervaded each new undertaking.

As construction neared completion, the superintendent arranged a series of meetings with members of the local Board of Education. They agreed to offer certification credit to teachers for developing grade-specific, curriculum compatible Discovery Lab activities during a two-week workshop planned and supervised by park staff. Twenty-six teachers participated. The activities they created, along with park-supplied archeological and historical background material, were compiled into a *Discovery Lab Teachers' Guide.*

Meanwhile, a local television station produced and donated two videotapes, "A Walking Tour of Ocmulgee National Monument" and an "Orientation to the Discovery Lab." These videos and the *Teachers' Guide* would be included in an information packet, available through loan or purchase, to teachers and other group leaders. A policy statement in the packet specified group size limitations, options for rotating larger groups, conduct expectations and responsibilities for agenda planning, supervision, and cleanup after use of the lab. Park personnel would serve only as facilitators, scheduling visits, assuring adherance to policy, and conducting periodic leader orientation sessions.

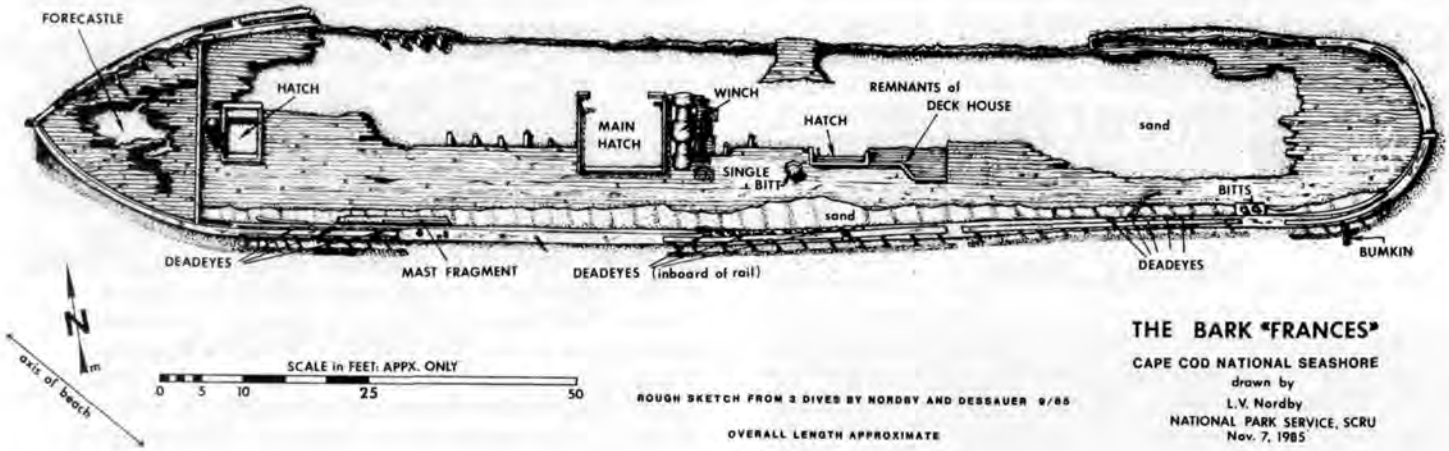
Ocmulgee National Monument's Dr. Charles Fairbanks Memorial Discovery Lab was dedicated in 1986 as part of the park's Golden Anniversary Celebration. Dr. Fairbank's widow, with his son and daughter, flew from New Orleans to Macon for the ceremony. Mrs. Fairbanks described her husband's love for Ocmulgee National Monument and for children. The Lab was, she thought, a tribute he would have throroughly appreciated.

During its initial year, the Discovery Lab attracted planners and educators from many museums and nature centers. They, too, were searching for ideas for hands-on facilities for youngsters. Since that time, thousands of students, preschool to college level, from local communities, the state and surrounding region, have visited the Lab. It has served as a location for professional conferences and meetings, an annual children's workshop series, and many other special programs.

The National Park Service officially recognized the Discovery Lab by awarding its creator the 1988 Freeman Tilden Award for interpretive excellence. I share this honor with the many people who contributed to the effort.

Hopefully, the Lab will continue to evolve as new ideas are generated and resources become available. As long as it exists, this memorial to Dr. Fairbanks must always be "something" which is truly special for the children.

Sylvia B. Flowers is cultural resource management specialist at Ocmulgee National Monument in Macon, GA.



This sketch map shows the remains of the wooden hulled bark *Frances*. The wrecked vessel lies buried off the coast of Massachusetts within Cape Cod National Seashore. Drawn by Larry Nordby.

Federal and State Shipwreck Management in the U. S.
(continued from page 13)

and to establish a framework within which these shipwrecks are to be managed and made accessible to the public.

Federal legislation was necessary because, prior to 1988, historic shipwrecks generally were treated under principles of admiralty law, where Federal courts could assert jurisdiction. More often than not, the courts treated historic shipwrecks as commodities lost at sea that are in marine peril and should be salvaged and returned to commerce. Salvage awards often disregarded a shipwreck's historical value, with the resultant loss of important historical and archeological information. On occasion, a Federal or a state government agency would be successful in claiming title to and management authority over an abandoned shipwreck in its respective waters, but there was great inconsistency from court to court and from state to state.

The Abandoned Shipwreck Act addresses these problems by asserting Federal title to the majority of abandoned shipwrecks located within three nautical miles of the U.S. coastline or in the internal navigable waters of the United States.[1] The Federal Government then transferred its title to most of those shipwrecks to the respective states to manage. The Federal Government retains title to and manages shipwrecks on Federal lands and shipwrecks entitled to U.S. sovereign immunity.[2]

One of the Act's most important provisions, from an historic preservation perspective, is that it specifies that the law of salvage and the law of finds do not apply to the abandoned shipwrecks to which title has been asserted under the Act. This provision removes those shipwrecks from the jurisdiction of Federal admiralty courts.

The Act identifies shipwrecks as resources having multiple values and uses, and says that shipwrecks are not to be set aside for any one purpose or interest group. Instead, the Act requires a comprehensive and balanced management approach that includes protection of important values and wise use of shipwrecks and shipwreck sites. Specifically, the Act says that the states are to manage the shipwrecks to which they now hold title to under the Act as multiple-use resources by:

- providing reasonable access by the public;
- protecting natural resources and habitat areas;
- guaranteeing recreational exploration of shipwreck sites;
- creating underwater parks or areas to provide additional protection for shipwrecks;
- making funds available from Historic Preservation Fund grants for the study, interpretation, protection and preservation of historic shipwrecks; and
- allowing for appropriate public and private sector recovery of shipwrecks consistent with the protection of historical values and environmental integrity of the shipwrecks and the sites.

The Act leaves it up to the individual states to wrestle with these seemingly conflicting objectives. What this means is that decisions regarding the management of shipwrecks must be made on a case-by-case basis by weighing and balancing the values and uses a particular shipwreck may have, the potential benefits to be derived from a proposed use, and the potential adverse effects to be caused by the proposed use. For example, a decision to allow commercial salvage or souvenir collecting at a particular shipwreck must consider the shipwreck's historical values. If the shipwreck is historically significant, the decision also must consider whether the loss of those values is acceptable and in the best interests of the public.

The Abandoned Shipwreck Act is not the only legal authority upon which Federal and state government agencies base their shipwreck management programs. Many other Federal and state laws and regulations also are used, including ones that deal directly with historic preservation, archeological resources management, land management, and government property. These laws and regulations are far too numerous to describe individually, given that there are 50 states, the District of Columbia, and 8 U.S. territories and possessions, not to mention numerous Federal agencies. However, key elements of Federal and state shipwreck management programs are presented in the next section of this paper.

Federal and State Programs

The Abandoned Shipwreck Act does not require that Federal and state agency shipwreck management programs be identical. However, it does say that programs should be consistent with the Act and with advisory guidelines developed by the National Park Service. Thus, the Federal statute takes into account the right of states to operate independently but, at the same time, expects some minimum level of uniformity from jurisdiction to jurisdiction.

NPS diver Daniel Lenihan examines several 500-1b. bombs on the hangar deck of the USS *Saratoga*. The aircraft carrier was sunk on July 25, 1946, in Bikini Atoll Lagoon as a result of Operation Crossroads. Photo by Larry Murphy.

Federal Programs

At the Federal level of government, there is no single agency that has jurisdiction over shipwrecks. Each Federal agency that manages submerged lands is responsible for managing any shipwrecks that may be located on those lands. In addition, each Federal agency that has authority over sunken U.S. warships and other vessels entitled to U.S. sovereignty is responsible for managing those shipwrecks, no matter where the vessels are located in the world.

On occasion, two or more Federal agencies may have limited jurisdiction over the same submerged lands or shipwrecks. This would be the case, for example, in a national park that also is a national marine sanctuary, or in a national park that contains a sunken U.S. warship. Federal agencies and state agencies also may have limited jurisdiction over the same submerged lands or shipwrecks. This often is the case in national marine sanctuaries, where the state generally owns the bottomlands while the Federal Government manages the water column and any resources in the water column. This also is the case in about 30 units of the national park system that contain submerged lands.

Multiple jurisdiction requires close communication and cooperation among the different agencies on a routine basis. Multiple jurisdiction also complicates management of shipwrecks, requiring the Federal land manager to be fully cognizant of the various Federal and state statutes and regulations that may apply.

In the United States, shipwrecks that are at least 100 years of age and located on federally-owned lands generally are considered to be archeological resources. These shipwrecks receive the fullest protection afforded under Federal law.[3] Shipwrecks that are between 50 and 100 years of age and located on federally-owned or managed lands also generally are considered to be archeological resources and are protected under Federal law.[4] Shipwrecks that are less than 50 years of age generally are not considered to be cultural resources and, as such, are not protected under Federal historic preservation laws. However, federally-owned shipwrecks would be protected under government property laws. It is the policy of Federal agencies to prohibit commercial salvage, treasure hunting, and souvenir collecting at federally-owned historic shipwrecks.

A suite of Federal laws and regulations set forth the historic preservation responsibilities of Federal agencies.[5] These responsibilities clearly relate to both non-submerged and submerged historic properties, including shipwrecks. Key provisions require Federal agencies to:

- conduct surveys to identify and evaluate historic properties under their control or jurisdiction;
- nominate historically significant properties to the National Register of Historic Places;[6]
- issue permits for scientific research at historic properties;
- establish comprehensive historic preservation plans to protect historic properties; and
- consider the effects of proposed undertakings on historic properties that are listed or eligible for listing on the National Register of Historic Places, and afford the Advisory Council on Historic Preservation an opportunity to comment on the undertaking.

Of all the Federal agencies having responsibility for submerged historic properties, the National Park Service is the furthest along in conducting surveys to identify and evaluate historic shipwrecks. In fact, the National Park Service is the only Federal agency that has established an office—the Submerged Cultural Resources Unit headed by Mr. Daniel J. Lenihan—-that is responsible for carrying out this work in units of the national park system.[7] Two other Federal agencies that also have taken an active interest in historic shipwrecks include the U.S. Department of the Navy, which is responsible for the majority of sunken U.S. warships, and the National Oceanic and Atmospheric Administration in the U.S. Department of Commerce, which oversees the national marine sanctuary program.

State Programs

In 1988, following enactment of the Abandoned Shipwreck Act, the National Park Service contacted the 50 states, the District of Columbia, and 5 U.S. territories and possessions (hereinafter collectively referred to as the states) to collect information on their respective shipwreck management programs. Forty-seven of the 56 political units responded. At that time, 27 states said they are authorized to establish shipwreck management programs, but only 20 had actually established such programs. Although there is tremendous variability among

(continued on page 16)

Federal and State Shipwreck Management in the U. S.
(continued from page 15)

state shipwreck management programs, there are some underlying commonalities in regard to jurisdiction, historic preservation activities, public access, and commercial salvage.

In many states, several different government agencies often have jurisdiction over shipwrecks in state waters. Agencies that have jurisdiction over shipwrecks often include those agencies that also are responsible for the state's historic preservation, natural resources, submerged lands, environmental protection, parks and recreation, and fisheries programs. More often than not, the state's historic preservation office functions as an advisor or consultant to the state agency that holds title to and has day-to-day management control over shipwrecks.

Most states have included consideration of historic shipwrecks in their historic preservation programs.[8] Under these programs, many states:

- employ underwater archeologists to locate and evaluate historic shipwrecks located in state waters;
- nominate historically significant shipwrecks to the National Register of Historic Places;
- issue permits for scientific research at historic shipwrecks; and
- if the state regulates the commercial salvage of shipwrecks, review the salvor's request for a salvage permit.

Most states provide public access to shipwreck sites for recreational exploration by sport divers, although only five states have established and maintain underwater parks or trails. Most states prohibit sport divers from removing any artifacts or other items from historic shipwrecks. About a dozen states also restrict public access to shipwreck sites when the site is being excavated or salvaged, when human remains are present, or when there is a health or safety danger. Many states encourage and use sport diver volunteers to conduct archeological surveys and excavations at historic shipwreck sites. In fact, many states would not be able to fulfill their shipwreck management responsibilities without the assistance of sport diver volunteers.

Of the 28 states that regulate the commercial salvage of abandoned shipwrecks, only 5 states prohibit the salvage of historic shipwrecks. States that allow the commercial salvage of historic shipwrecks generally place conditions upon the salvor in an effort to protect the shipwreck's historical values. For example, salvors often are required to:

- prepare a research design acceptable to the state;
- use archeological methods to excavate the shipwreck;
- employ qualified underwater archeologists and conservators;
- preserve the artifacts and materials recovered from the shipwreck site; and
- prepare a professional archeological report.

Twelve states retain title to all artifacts and materials recovered, while 16 states award a portion to the salvor.

Advisory Guidelines

The Abandoned Shipwreck Act directed the National Park Service to issue guidelines to assist the states and Federal agencies in developing legislation and regulations to carry out their responsibilities under the statute. The Act further specified that the guidelines' purposes are to:

- maximize the enhancement of cultural resources;
- foster a partnership among sport divers, fishermen, archeologists, salvors, and others interested in the management of federally-owned and state-owned shipwrecks;
- facilitate access and use of shipwrecks by recreational interests; and
- recognize the interests of individuals and groups engaged in shipwreck discovery and salvage.

The National Park Service solicited and received considerable input from the public, especially from sport divers, during development of the guidelines. The final guidelines were issued on December 4, 1990 (55 FR 50116-50145).[9] The guidelines provide the states and Federal agencies with detailed advice on:

- establishing state and Federal agency shipwreck management programs;
- funding shipwreck programs and projects;
- surveying, identifying, documenting, and evaluating shipwreck sites;
- providing for public and private sector recovery of shipwrecks;
- providing public access to shipwrecks;
- interpreting shipwreck sites;
- establishing volunteer programs; and
- creating and operating underwater parks or preserves.

Two threads of advice are woven throughout the guidelines—one relating to public involvement and the other to interagency cooperation and collaboration. Public involvement in a Federal or a state agency's shipwreck activities is crucial. The public is, after all, the benefactor of the program. Involving the public is a primary means for educating people about the Nation's maritime history and for increasing people's awareness about the importance of preserving historically significant shipwrecks. In addition, the public can provide agencies with much needed information about recreational, tourism, and other values and uses a particular shipwreck may have. Government shipwreck management programs also depend upon the continuing support of the voting taxpayer. Involving the public in shipwreck activities will help agencies develop greater constituent support for their programs.

The value of cooperation and collaboration among government agencies and other entities is readily apparent. No state or Federal government agency has the financial means or the staff to carry out its shipwreck management responsibilities in isolation. It is particularly important for agencies that have jurisdiction over the same submerged lands or shipwrecks to cooperate with each other and to collaborate on projects on a routine basis. This will ensure that the shipwrecks are afforded the fullest protection possible under the various laws and regulations that may apply. It also generally will save money and reduce duplication of effort.

The Future

What does the future hold for shipwreck management in the United States? Federal and state shipwreck man-

agement programs in the United States are still evolving. Many of the states and Federal agencies are in the process of establishing programs to carry out their shipwreck management responsibilities. Others are making improvements to existing programs to make them consistent with the new Federal statute and with the National Park Service's advisory guidelines.

Virtually every state and Federal agency that has responsibility for submerged lands needs to conduct systematic surveys to inventory the resource base—to locate and identify shipwrecks under their jurisdiction or control and, then, to evaluate and document the shipwrecks. In addition, most agencies, at both the state and Federal levels of government, need to ensure that they have the wherewithal to adequately protect historically significant shipwrecks. Most agencies also need to build and expand public education programs, and strengthen the partnership that exists between the state and Federal levels of government.

Unfortunately, Federal and state shipwreck management programs in the United States also are being challenged by outside forces. At least two court cases, filed in Federal admiralty court, are examining the constitutionality of the Federal statute itself. In addition, a 1908 treaty on wrecking and salvage in certain U.S. and Canadian waters may make Federal and state shipwreck management programs ineffectual in waters near the international border between the two countries. Steps are being taken to deal with these particular situations, but there may be more looming on the horizon.

In the future, there may be additional shipwreck legislation at the Federal level. What might new legislation do? It might extend Federal and state government jurisdiction over shipwrecks in U.S. waters beyond three nautical miles of the coastline. It also might reexamine the issue of commercial salvage, and place additional restrictions on salvage activities at historically significant shipwrecks. Any new legislation, however, will have to wait until the questions about constitutionality are settled and until the states and Federal agencies have had an opportunity to establish and maintain shipwreck management programs.

"And so it goes..."

---

[1]Abandoned shipwrecks to which title is asserted under the Act are those that are either (1) embedded in submerged lands, or (2) embedded in coralline formations protected by a State, or (3) on submerged lands and listed in or determined eligible for listing in the National Register of Historic Places.

[2]American Indian tribes hold title to and have management authority over abandoned shipwrecks located on Indian lands.

[3]These shipwrecks receive protection under the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa-mm). This Federal statute establishes a permitting system for scientific research at archeological sites, prohibits activities damaging to archeological resources, and authorizes penalties for violations under the statute. Penalties include maximum fines from US$10,000 to $100,000 and maximum prison terms from one to five years, depending upon the nature of the violation. Privately-owned vehicles and equipment used in connection with violations are subject to forfeiture to the Federal Government. This statute does not apply on the outer continental shelf.

[4]These shipwrecks are protected under the Antiquities Act of 1906 (16 U.S.C. 431-433). This Federal statute establishes a permitting system for scientific research at archeological sites and authorizes penalties for violations under the statute. Maximum penalties are US$500 fines and 90 days imprisonment. This statute does not apply on the outer continental shelf or in the Ninth Circuit of the U.S. Court of Appeals, where it has been declared unconstitutionally vague.

[5]The Antiquities Act of 1906, the Archaeological Resources Protection Act of 1979, the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.), and their respective implementing regulations collectively set forth the responsibilities of Federal agencies to preserve and protect historic properties that they own or control.

[6]National Register of Historic Places criteria for evaluation require that a historic property possess integrity of location, design, setting, materials, workmanship, feeling, and association and either (1) be associated with events that have made a significant contribution to the broad patterns of United States history; or (2) be associated with the lives of persons significant in the United States' past; or (3) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (4) have yielded, or may be likely to yield, information important in prehistory or history.

[7]The Submerged Cultural Resources Unit is in the National Park Service's Southwest Cultural Resources Center, P.O. Box 728, Santa Fe, New Mexico 87504-0728, United States of America.

[8]The National Historic Preservation Act of 1966 and its implementing regulations set forth the responsibilities of the States to administer a State historic preservation program and to conduct a broad range of activities relating to the identification and preservation of historic properties.

[9]Copies of the guidelines may be obtained by writing to the Departmental Consulting Archeologist, National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, D.C. 20013-7127, United States of America.

Michele C. Aubry is a senior archeologist in the Anthropology Division, National Park Service, Washington, DC. She is the author of NPS's "Abandoned Shipwreck Act Guidelines," published in the *Federal Register* on December 4, 1990.

Printed on recycled paper

Washington Report

Capitol Contact

Bruce Craig

Salt River Bay National Historical Park and Ecological Reserve

One of the most remarkable natural and archeological areas in the Caribbean is now a part of the National Park System. In February, the Senate and House of Representatives agreed on a bill to preserve an area considered the Columbus expeditions' only landing place in the present-day U.S. territory. Later that month, President Bush signed the legislation (P.L. 102-247) establishing the 912-acre Salt River Bay National Historical Park and Ecological Reserve.

Conservationists have long had their eye on the unspoiled West Indies, an area that still looks very much like it did when Columbus landed there. Efforts to preserve Salt River Bay date to the 1950s. The area received National Historic Landmark (NHL) designation in 1960.

In addition to its historical associations, the bay (where fresh water meets an ocean inlet) is the only place of its kind left in the Virgin Islands. In 1980, the area was designated a National Natural Landmark (NNL), thus making Salt River Bay one of only a very few sites to receive both the NHL and NNL designation. All the natural elements of the coastline—from forested mangrove swamps along the shore to a vibrant coral reef—are intact. Because it provides wildlife with a lush and undisturbed terrain, the Salt River Bay serves as a "biological lifeboat" for the Virgin Islands.

Historic Sites Act Amendments

Representative Bruce Vento (D-MN), Chairman of the House Subcommittee on National Parks and Public Lands, rushed through the House of Representatives a bill (HR 4276) that seeks to halt the proliferation of areas not formally authorized through the House Interior Committee and the Senate Energy Committee. Vento introduced the bill to prevent the recurrence of situations where an area was never formally authorized but has received appropriations. According to Vento's staff, in the fiscal 1992 appropriations bill, 12 such unauthorized areas collectively received funding in excess of $33 million.

Testifying before Vento's subcommittee on March 10, National Park Service Director James Ridenour supported the bill's objectives but opposed the specific means by which it would achieve them as ineffective and potentially counterproductive. The bill rapidly passed the House but its future in the Senate is uncertain.

If you would like more information on either of the legislative initiatives discussed above, drop me a note at: National Parks and Conservation Association (NPCA), 1776 Massachusetts Avenue, NW, Suite 200, Washington, DC 20036.

Preservation Resources

Papers from Navajo Conferences

A volume consisting of proceedings from the third, fourth, and sixth annual Navajo Studies Conferences is now available. The proceedings volume (approximately 200 pages) contain papers delivered by Navajo and non-Navajo participants in the 1988 Conference in Tsaile, AZ; the 1989 Conference at the University of New Mexico Gallup Branch; and the 1992 Conference in Window Rock. The cost per volume is $25.00, plus $2.00 each for postage and handling. Order from Navajo Studies Conferences Book, P.O. Box 628, Window Rock, AZ 86515. For more information, contact Alexa Roberts at 602-871-6437.

Review

Tradition and Innovation: A Basket History of the Indians of the Yosemite-Mono Lake Area by Craig D. Bates and Martha J. Lee.

Yosemite Association, P.O. Box 230, El Portal, CA 95318; 1991; 252 pp and 363 duotone reproductions; $49.95, plus $4.00 shipping.

Reviewed by Barbara Beroza, collections manager at the Yosemite Museum, Yosemite National Park, CA.

This comprehensive study focuses on the history and basketry of the Miwok and Paiute inhabitants of the area in and around Yosemite National Park. Illustrated with hundreds of historic images and photographs of baskets from the Yosemite Museum collection, many published for the first time, this book details the dramatic changes that took place in the lives and basketry of Yosemite's native people from prehistoric times to the present.

After 1851, the settlement of the Yosmeite area by Euro-Americans forced Indian people to adopt a new lifestyle and participate in a different economy. These changes had a profound influence

on their basketry and material culture. In addition, collection of Indian baskets by non-Indians influenced Yosemite weavers. Baskets were transformed from utilitarian objects to art.

This book is the result of over 20 years of conversations and interviews with native people of the Yosemite-Mono Lake area, extensive research with baskets in museums and private collections nationwide, and information collected from historic letters, diaries, travel accounts, government documents and newspapers.

Specific Yosemite baskets are described in detail, and their materials and weaving technologies identified. The lives and weaving careers of some of the women who have lived and worked in Yosemite are documented in brief biographies. The important role of basket collectors in preserving and documenting development and change in Yosemite basketry is also explored. Special attention is given to the basket collection of James H. Schwabacker, which includes some of the most important baskets produced in the Yosemite-Mono Lake area between 1920 and 1950.

This important contribution to the study of the history and art of the Indian people of the Yosemite Mono-Lake region will be valued by visitors to Yosemite with little prior knowledge of its history and people, by Yosemite and California historians, and by students of Native American art and history.

Craig D. Bates, Curator of Ethnography for the National Park Service in Yosemite National Park, CA, has lived and worked in the Yosemite area since 1973. He has spent most of his life researching Native American culture, and is the author of over 80 articles on the subject.

Martha J. Lee, an Assistant Curator for the National Park Service in Yosemite National Park, has lived in the park since 1977 and worked in the Yosemite Museum since 1985. She is a graduate of Stanford University in art history.

Information Management

Computer Mapping National Register Properties

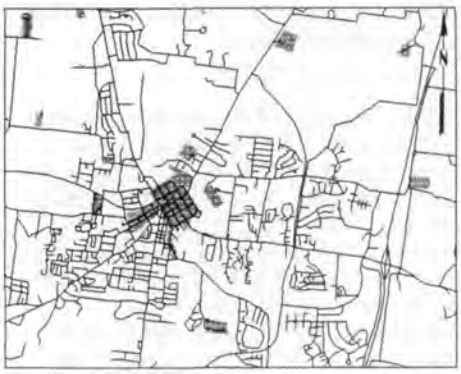
Bonnie Burns
Allison Johnson

In mid-April, technicians at the NPS Interagency Resources Division's Cultural Resources GIS facility began to create computer maps of 3,187 National Register property boundaries. This project is part of the Civil War Sites Advisory Commission's survey of battlefields currently being conducted. Digitized boundaries will be created for all National Register listings in counties and parishes containing battlefields being examined by the Commission (see list below).

State	County
Alabama	Baldwin
Arkansas	Jefferson Pulaski Sebastian Washington
California	San Diego
District C	District C
Florida	Duval Hillsborough
Georgia	Catoosa Chatham Clayton Cobb DeKalb Fulton Gordon Jones Pauling
Kentucky	Boyle Wayne
Louisiana	Ascension E. Baton Rouge Orleans
Maryland	Allegany Frederick Washington
Mississippi	Alcorn Hinds
Missouri	Greene Jackson Layfayette Newton
New Mexico	San Miguel
No. Carolina	New Hanover
No. Dakota	Burleigh
Oklahoma	Osage Wagoner
Pennsylvania	Adams York
So. Carolina	Charleston
Tennessee	Benton Davidson Grainger Hamilton E. Feliciana Henderson Jefferson Knox Rutherford Sevier Shelby Sullivan Williamson
Texas	Galveston Jefferson
Virginia	Campbell Chesterfield Dinwiddie Fairfax Hawkins Hanover Henrico James City Loudon Norfolk Prince William Spotsylvania Stafford York Hampton Newport Williamsburg
West Virginia	Jefferson
TOTAL	**73**

It will take 8 to 10 months to finish the project. Currently, GIS technicians have completed Shelby, Benton, Henderson, Rutherford and Williamson counties in Tennessee and Baldwin County, Alabama.

Digitizing these properties serves two main purposes. First, many of the properties played an integral part in the battles under study, as hospitals, headquarters, or part of the battlefield setting. By looking at the location of the sites in relation to the battlefield, we can, in part, assess the integrity of the battlefield. Second, the effort will serve as a pilot project in anticipation of creating a digitized map database of all National Register property boundaries as a product for use by planning organizations. For more information about the project, please contact either of the authors at 202-343-2239.



Close-up of Franklin, Tennessee. Shaded areas are National Register properties. Streets are U.S. Census TIGER/Line file data.

Allison Johnson and Bonnie Burns are contractors for the National Conference of State Historic Preservation Officers working with the National Park Service.

Viewpoint

Archeology and the Conservation Ethic: Another Perspective

Lawrence E. Weigel

After reading David Dutton's viewpoint *(CRM,* Vol. 15, No. 1), I felt compelled to respond to some of his criticisms. Mr. Dutton has "witnessed a disturbing monotony in archeologists' and agencies' treatment of archeological properties." The monotonous treatment he is referring to is "data recovery." I contend that agencies and archeologists have little choice in the matter and remind Mr. Dutton that in the 1950s and '60s we were faced with the distrubing monotony of the destruction of historic and prehistoric resources with no notion of what was being destroyed except in rare occasions. I am sure Mr. Dutton would have to agree that the situation is far better today.

The next charge relates to "inappropriate or poorly conceived" data recovery plans. These plans are attributed by Mr. Dutton to: (1) misunderstandings of the law; (2) lack of creativity when it comes to mitigation; and (3) a conservation ethic that "gives first priority to preserving the information from each individual site rather than dovetailing it into a broader context."

My experience as an archeologist for a state transportation agency working on FHWA-sponsored projects suggests the

(continued on last page)

Archeology and the Conservation Ethic: Another Perspective
(continued from page 19)

review function of the Advisory Council should act to limit "inappropriate or poorly conceived" data recovery plans—that's their job. As to misunderstanding the law, after following the ACHP's *Section 106, Step By Step,* (October 1986) and *Treatment of Archaeological Properties, A Handbook,* (1980), I feel that the Council has made it clear about what they expect. The issue of a lack of creativity has its answer in the regulations. By the time we have settled on a proposed alignment we have considered all other options and have chosen the one that minimizes the impact to all resources, including cultural ones. The third topic, our conservation ethic, is also clearly required by the Council's guidelines and standard treatment practices. We consider the value of the individual site because it is the site to be disturbed by the project. After it is tested, if the site is found eligible because of its ability to answer regionally important research questions, the project's effects will be mitigated by a data recovery plan. But one must acknowledge that some sites lack a regional data context due to the lack of research in the general area. One must also acknowledge that those sites are important in creating the context for the evaluation of other sites.

Mr. Dutton charges that public agencies (NPS, USFS, ACHP, SHPOs) as well as the private sector are reactive rather than proactive in their preservation efforts. I will dispute that charge. Having worked for more than two of the above-noted agencies, my experience has been that when a project is in its conceptual stage, the resources are identified long before specific plans are drafted so that critical resources can be avoided during the design phase.

Mr. Dutton discusses other options to excavation such as avoidance and long-term management. First, Mr. Dutton seems to view excavation as if it were the total destruction of a site. Data recovery often results in the excavation of less than 1% of a site. The rest, what the project does not impact, is protected by the establishment of an Environmentally Sensitive Area (ESA) designation and essentially preserved in place. Secondly, Mr. Dutton suggests long-term management as an alternative. FHWA will not fund the curation of artifacts excavated from an eligible or potentially eligible site nor will they fund the long-term management of a site. As long as the individual state or agency has that responsibility, it will continue to be more cost-effective to pay for curation than long-term management.

Skipping to the last few paragraphs of Mr. Dutton's viewpoint, I find an odd assertion: "Therefore, many archeologists operate under the assumption that every archeological site which is determined eligible for the National Register is either worth saving or excavating simply because it is eligible for the National Register."

If a site was considered eligible under criteria (d) "that have yielded or may be likely to yield information important in history or prehistory," then if project effects have not been mitigated through excavation, they should be, if the site cannot be avoided. If a site does not contain important information, it does not belong on the National Register unless it qualifies under other criteria, in which case, excavation will probably not be an effective mitigation tool.

If Mr. Dutton's criticism is that there are sites being nominated that aren't eligible, then that is a problem of the local SHPO and of the Keeper's office. If the criticism is a veiled reference to testing sites to determine eligibility, we often have no choice since many instances can be cited that illustrate that a site's surface often offers little or no clues as to its depth, content, or integrity. At the point of being overly simplistic, the issue of eligibility under criteria (d) boils down to whether a site has sufficient content and integrity to answer regional research questions and if a regional research context does not exist, can the site contribute to the establishment of one. If it can, it is eligible; if it cannot, it is not. Under these circumstances, if it is eligible and going to be adversely impacted, preserve the data with mitigation and protection for any remaining site area. If it is not eligible, take all measures to minimize impact, proceed with the project, and protect what is left.

Perhaps Mr. Dutton is referring to a very narrow set of circumstances. Suppose there is an archeological district composed of several sites and one of those sites is going to be affected by a proposed project. The site is thought to be similar to others in the region that have been excavated. Is Mr. Dutton suggesting that on the basis of the potential for "redundant data" that we need not save or excavate the site? I, and our SHPO, would argue that without an analysis of the data, a claim of redundance cannot be supported. We might, however, test the site to determine if it was a contributing element of the district that was nominated.

While we are on the topic of redundant data, I question how a hypothesis can become a sound theory without subsequent tests yielding similar results. The idea of writing off a site because it contained redundant data sounds like a developer's ploy.

I will condone mitigation without excavation for circumstances where the site is considered eligible by virtue of containing human remains and where the most likely descendants object to excavation. Usually, an engineering solution can be found to accommodate the situation.

Lawrence Weigel is associate environmental planner, cultural resources, Department of Transportation, Sacramento, CA.

Bulletin Board

Landscape Workshop

The 1992 Historic Landscape Maintenance Workshop, co-sponsored by the National Park Service's Midwest Region and The Garden Center of Greater Cleveland, will be held August 19-21. The program is primarily aimed at educating field maintenance personnel from historic sites under local, state, Federal, and private ownership. The goal of the workshop is to provide specialized training on issues and techniques related to preservation maintenance of historic landscapes and to encourage the development of a network of skilled professionals in this field. Through a combination of classroom sessions, field trips and on-site demonstrations, the workshop will provide state-of-the-art information on topics such as view and vista management, historical plant material and horticultural techniques, preservation policies and the application of landscape research and documentation. Registration deadline is June 10 for NPS employees and June 17 for other participants. For further information, contact Regional Historic Landscape Architect Mary Hughes at 402-221-3426. To request a brochure, contact the Garden Center, 11030 East Boulevard, Cleveland, OH 44106; 216-721-1600.

Call for Papers

The 15th Annual Conference of The National Council on Public History will be held April 29 to May 2, 1993 in Valley Forge, PA. The Council was organized in 1980 to encourage a broader interest in professional history and to bring together those people, institutions, agencies, businesses, and academic programs associated with public history.

Deadline for submitting proposals, which may relate to any subject of public history, is July 1, 1992. For more information, contact Jeffrey P. Brown, Department of History, New Mexico State University, Las Cruces, NM 88003.

For membership inquiries, write to: NCPH Executive Secretary, 301 Cavanaugh Hall—IUPUI, 425 University Blvd., Indianapolis, IN 46202-5140.