

common ground

ARCHEOLOGY AND ETHNOGRAPHY IN THE PUBLIC INTEREST

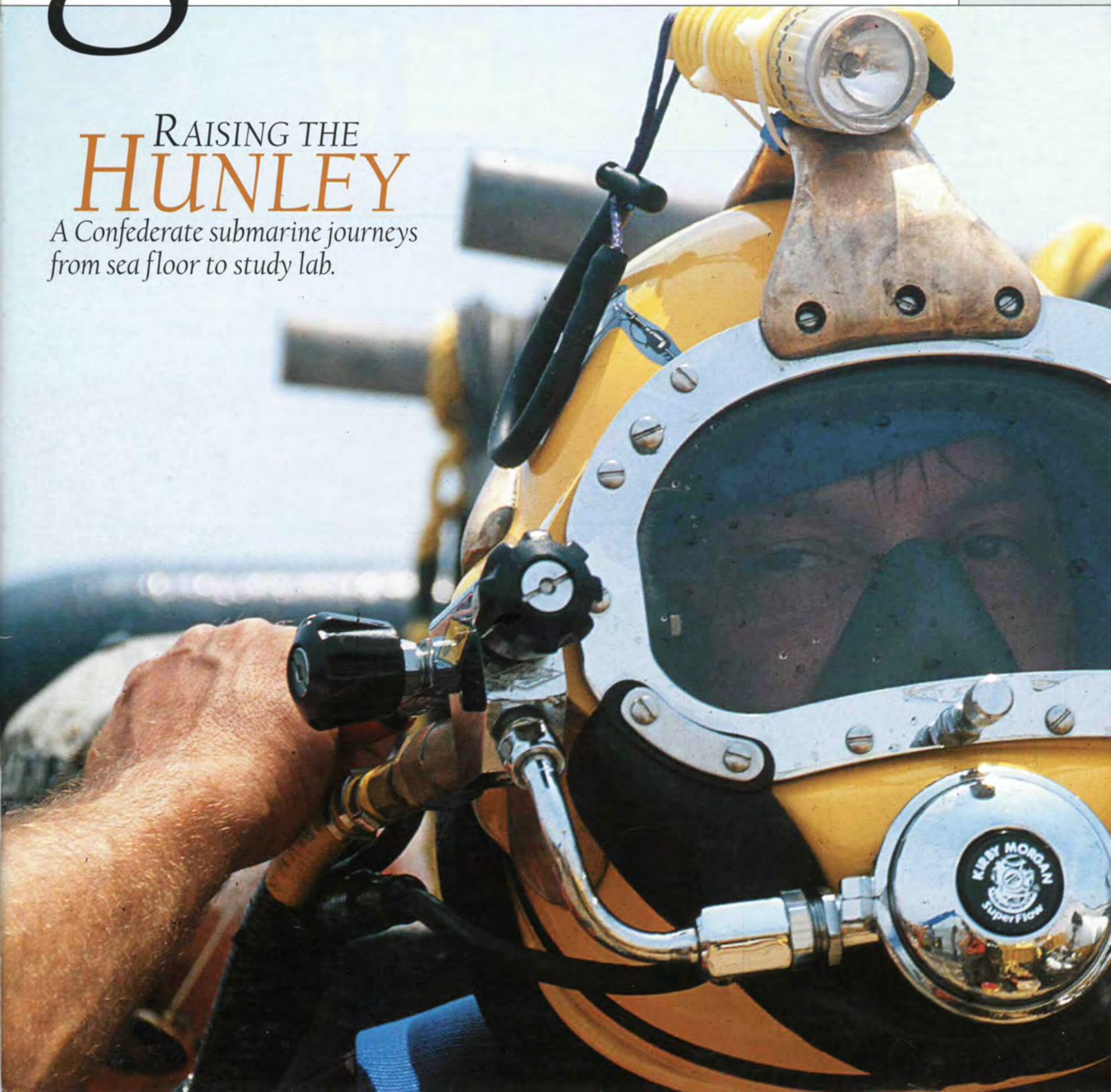


SUMMER/FALL

2001

RAISING THE HUNLEY

*A Confederate submarine journeys
from sea floor to study lab.*



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**Common Ground:
Archeology and
Ethnography
in the Public
Interest**

**Summer/Fall
2001**
Volume 6/Number 1

Cover: Project director
Bob Neyland of the
Naval Historical Center
prepares to dive on the
Confederate submarine
Hunley. Brett Seymour/
NPS, courtesy Friends of
the Hunley

Opposite top: NPS
underwater archaeologist
Matt Russell sketches
details of Hunley's wreck
site. Brett Seymour/NPS,
courtesy Friends of the
Hunley

Opposite bottom: Bill
Lipe at Glen Canyon
National Recreation
Area. Kari Chalker,
Crow Canyon
Archaeological Center

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RAISING THE HUNLEY BY JOSEPH FLANAGAN

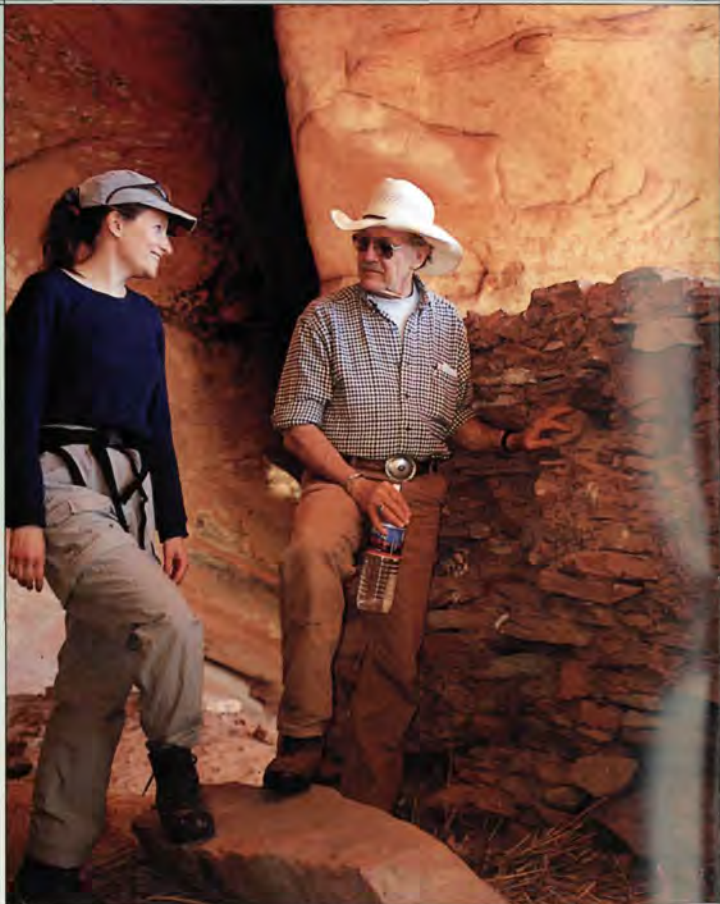
The story of the Confederate submarine
Hunley, raised from the sea in a
remarkable archeological investigation,
is astonishing in many ways, not least for
the cooperation that has made it possible.

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THREAT TO KNOWLEDGE: RESEARCH AND THE FUTURE OF ARCHEOLOGY IN THE NATIONAL PARKS

AN INTERVIEW WITH
SCHOLAR BILL LIPE

The parks have long played a leading role
in advancing archeological research, says
Bill Lipe. Today, he believes, the preserva-
tion successes may threaten the flow of
knowledge and, ironically, the reason for
saving sites in the first place.



- in context -

BY FRANCIS P. MCMANAMON

What Does the Public Really Know About Archeology?

The Harris Interactive public opinion study, "Exploring Public Perceptions and Attitudes About Archaeology," has a lot of good news for archeologists. There is substantial interest in the discipline; the educational and scientific value of research is appreciated; and there is significant support for protecting the archeological record using laws and regulations. But the findings also point out a serious problem, echoed by surveys at New England colleges and in Vancouver, British Columbia. Few members of the public know the outline of cultural development in the Americas. Few can name an archeological site in the New World. Few understand the archeological method or specific techniques. Archeologists need to explain and promote their perspective, which provides an invaluable view of the past. Rarely are archeological data instantly understandable to the untrained. Archeological sites, more often than not, are invisible or difficult to discern; they frequently resemble jumbles of stone rather than camps, villages, towns, or cities where human beings lived, played, and worked. Archeological techniques—and interpretations based upon them—usually need some translation to be understood by one and all. Nearly 20 years ago, I was involved in excavating a prehistoric ossuary, a burial with the remains of over 50 individuals. It was found by accident at a small construction project on Cape Cod, hundreds of miles from known sites of the same sort. The discovery occurred in the midst of a bustling summer community during August. Many residents and vacationers visited and voiced their interpretations of the find—the site of a massacre, a pile of plague victims hurriedly buried. The excavation team was itself unfamiliar with this kind of interment, not, at the time, found anywhere else in southern New England. Also perplexed were official observers from the Wampanoag tribe; this was not a type of burial recounted by their elders. Only after research did it become clear that similar communal burials were known among the Huron and Chesapeake Bay tribes during

early European contact, an effort to strengthen ties among families in a village perhaps. In this case, the archeological perspective was not one among a number of equally likely interpretations, rather, without it, the events leading to the burial would be open to speculation. Archeological approaches, like many scientific methods and techniques, are not necessarily self-evident. In an essay in *Science*, Boyce Rensberger, a former science reporter for the *New York Times* and *Washington Post*, points out that scientists frequently need to "translate" for journalists and their readers. Journalists, he argues, need to better understand scientific inquiry for an audience that is not well-versed. He notes that polls show high interest in science but, as the Harris survey confirms, low understanding of scientific knowledge and concepts.

Rensberger's concern is that most people are unable to distinguish between real science and pseudoscience, which he characterizes as based on uncontrolled experiment, anecdotal evidence, and passionate assertions. Unfortunately many people see no difference between the two. Archeologists are very familiar with this problem, from Von Daniken's *Chariots of the*

“ Few [members of the public] can name an archeological site in the new world. ”

Gods to the more rip-roarin' aspects of *Raiders of the Lost Ark*. While we should be open to alternate views, not all are illuminating or benign. Some must be challenged. There are those who see sites and collections as a source of objects for sale; almost always this leads to destruction. Other perspectives so undervalue science that their proponents work actively to block investigations. Interpreting the archeological record is simply too important to leave to others. We are fortunate that archeology has inherent appeal. This provides fertile ground, but even fertile ground must be cultivated to bear fruit. An active, informed public is an essential source of political and economic backing. If sites are to be preserved for the long term, and archeological programs and projects supported, public education and outreach must be an actively pursued, highly regarded part of the discipline.

Francis P. McManamon is Chief, Archeology and Ethnography Program, and Departmental Consulting Archeologist, National Park Service, Department of the Interior.



STEVE HEASLIP, CAPE COD TIMES

CASTING FOR A SOLUTION

STUDY AIMS TO PRESERVE CULTURE OF NATIONAL SEASHORE

Cape Cod National Seashore plays a central role in the lives of local surfcasters and off-road-vehicle users, who for years have found personal fulfillment there. But to them, Park Service decisions sometimes seem arbitrary, ill-informed, and influenced by “outsiders.” That’s one of the findings of a recent NPS study, part of a push to reach out to those with traditional ties to the parks.

When the seashore closed 30 miles of beach to protect nesting piping plovers, it brought a problem into focus sometimes faced by park managers: conflict with local constituents over larger goals. Closing the beach meant an endangered species could raise its young peacefully. But surfcasters and ORV users saw it as infringing on their traditional right to access.

The study, commissioned by the NPS applied ethnography program, portrays a group that derives a sense of identity from a bond with the beach. Many anglers are of the WW II generation, which lends a “freedom” theme to the findings, says Eileen Mueller, the cultural anthropologist who carried out the work. For most, the tradition is handed down through generations. Increasingly the anglers are women.

Mueller interviewed the anglers on fishing trips, capturing not only the thrill of surfcasting, but how the solitude and beauty enrich it. “For me it’s like a religious experience,” said one.

“One of the biggest revelations is the surfcasters’ ‘startling’ range of ages and backgrounds, says Maria Burks, the seashore’s superintendent.”

The group has intimate knowledge of the shore’s resources, Mueller reports, which some of them say the park ignores in favor of input from environmental organizations. Respondents believe they should be systematically consulted when decisions are on the table, not merely notified of meetings.

One of the biggest revelations was the surfcasters’ “startling” range of ages and backgrounds, says Maria Burks, the seashore’s superintendent. “If that is reflective of the broader group, there will be different kinds of contacts we might make [in the future],” she says.

The report evidences a willingness to work together, a sentiment shared by the anglers and ORV users. Says one, “Without the [Park Service] the whole area would be condos, so I’m thankful they’re here.”

Above: Angler casts into the surf. “One of the most important things we learned [from the report] is what we can expect,” says seashore superintendent Maria Burks. “It gives us an idea of what’s possible—and how to frame a request for what we want studied.”

HONORS FOR COMMON GROUND

WINS ART DIRECTORS CLUB AWARD

The Art Directors Club of Metropolitan Washington—the region’s premier graphic design organization—selected *Common Ground* for inclusion in its annual “best” exhibition, which opened with a gala awards ceremony at the French Embassy on June 29. “Each piece accepted into the show represents a unique combination of two elements: a client’s message and an art director’s vision,” said Susan Fuller, the club’s executive director. “They illustrate what can be achieved on those rare occasions when the union of talent, materials, and ideas results in something close to flawless.” *Common Ground* received a certificate of merit.

Earlier, the editors of *Utne Reader* nominated *Common Ground* for an alternative press award in the category general excellence: design. “The alternative press award is unlike most other awards,” said the editors. “There is no nominating process . . . no panel of experts. It’s just the *Utne Reader* editorial team debating amongst ourselves about which publications have done an exceptional job over the past 12 months.”



Nation’s Capital to Host World Congress

The World Archaeological Congress plans its next meeting in Washington in June 2003. The focus will be on common issues related to research, professional training, public outreach, and preserving sites, with an emphasis on involving experts from developing nations and indigenous peoples. The Smithsonian’s National Museum of the American Indian will be a cosponsor of the event.

For more information, go to www.american.edu/wac5.

REPOSITORIES OF TRUST

POLL FINDS MUSEUMS MOST CREDIBLE

A recent survey says that 43 percent of Americans consider museums more credible than any other source of information. The poll, commissioned by the exhibit design firm of Ueland, Junker, McCauley, and Nicholson, asked respondents to compare museums with books, newspapers, magazines, television, radio, and the Internet.

Over a third had visited a museum in the past year, and 86 percent agreed with the statement “A lot of museums are doing imaginative new things to make them more interesting places.” A 1999 Harris poll—sponsored by the NPS archeology and ethnography program and the nation’s top archeological organizations—reported that 88 percent of respondents had visited a museum with an archeological exhibit (see *Common Ground* winter 1999).

Seeing actual objects is a potent experience, says Tom Junker of UJMN. “With the Internet, books, and magazines, you don’t confront the object itself . . . [In museums] there’s nothing between you and historical fact.” For more details, visit the firm’s web site at www.ujmn.com.

ONLINE

Three notable publications, unavailable in print, are now online.

Protecting the Past, which collects 37 articles on archeological preservation, is targeted mainly to archeologists, attorneys, educators, and related professionals. On the web at www.cr.nps.gov/seac/protectg.htm.

Site Preservation in Mexico draws on the extensive experience of Nelly Robles, a pioneering preservationist in that country and director of Oaxaca’s Monte Alban World Heritage Site. Robles offers many insights into what she calls “the conflict-laden character of the social circumstances which envelop Mexico’s cultural heritage.”

Located on the web site of the Society for American Archaeology at www.saa.org/Publications/oaxaca/cover.html.

The Antiquities Act of 1906, Ronald F. Lee’s history of the statute first published in 1970, looks at the compelling story of a cornerstone in the American preservation movement. On the web at www.cr.nps.gov/aad/pubs/index.htm.

TRACKING THE ANCIENTS IN THE HIGH SIERRAS

ARCHEOLOGISTS UNCOVER NEW EVIDENCE AT SEQUOIA-KINGS CANYON NATIONAL PARK



Recent research at California's Sequoia-Kings Canyon National Park may challenge assumptions about early life in the Sierra Nevadas. Prehistoric people may have regularly visited the high elevations, long thought to hold little attraction. Light has also been shed on who they were and what they probably did.

Backpacking through the park's remote wilderness in the summer of 1996, Kathleen Hull, a vacationing archaeologist, took the trouble to record results of ancient activity. It wasn't the first report of prehistoric sites in the alpine, but it was one more reason to reexamine the idea that the people favored more accessible, resource-rich environs.

Thomas Burge, an archaeologist with the Park Service, and William Matthews, an archaeologist with the Forest Service, had been discussing a possible survey of wilder-

ness areas by their agencies. They decided to look at some of the high locations. Hull passed along her notes. For three field seasons from 1997 to 1999, teams went to the Bench Lake/Taboose Pass area on the Sierra Nevada's western divide, which was between 10,600 and 11,500 feet. Parts could only be reached by helicopter. Working on a modest budget, NPS took advantage of an agreement with the Forest Service that provided volunteers.

Twenty-six sites were recorded, most with scattered fragments of

"The most intriguing possibility, archeologists say, was the presence of women and children, suggesting more than an all-male hunting foray into the mountains."

obsidian, a volcanic rock prized in tool- and weapon-making. Also present were stone structures believed to be hunting blinds or temporary shelters. Associated with these sites were stone rings, vessels of steatite, hand-held grinding stones, and other evidence of food preparation. The most intriguing possibility, archeologists say, was the presence of women and children, suggesting more than an all-male hunting foray

ALL PHOTOS TOM BURGE, NPS

Above left:
The rugged alpine of Sequoia-Kings Canyon National Park.

Above right:
Archeologists investigate prehistoric site.



Left: Projectile point from an alpine site. **Below:** Taboose Pass with (bottom) archeological survey flags.



into the mountains. One site may have been used cyclically for hundreds of years; artifacts include 19th century trade beads.

Burge and Matthews propose that the sites' attraction may have been their location along east-west passes, which appear more accessible (and trade friendly) than passes running north to south. The research argues for contact between culturally distinct groups on both sides of the southern Sierras. Chemical analysis of the obsidian shows that some of it came from sources far away, an argument for trade. The dates range from 1200 BC to AD 1850.

According to a report by the researchers, "The movement of peoples, goods, and culture across the southern Sierra Nevada certainly extends far back in time. How far back and to what degree remains to be seen." At least two more field seasons are planned.

AWARDS

The John L. Cotter Awards for 2000 and 2001, given for excellence in archeology in the national parks, have gone to Joseph Labadie of Amistad National Recreation Area in Texas and Jeffery Burton of Tucson's Western Archeological and Conservation Center.

Labadie supervised one of the most ambitious archeological projects in the park system, documenting sites that span thousands of years while conducting a field school with the Texas Archaeological Society.

Burton was recognized for overseeing the first comprehensive study of WW II Japanese relocation camps. The study's report, "Confinement and Ethnicity: An Overview of World War II Japanese American Relocation Sites," has been reprinted four times to meet demand.

The honorees, acknowledged at last April's annual meeting of NPS archeologists, were recognized for their exemplary research design, thorough scientific analysis, broad public involvement, and wide sharing of research.



SHIPWRECKS BELONG TO SPAIN

SUPREME COURT DECLINES TO HEAR ASSATEAGUE ISLAND SALVAGE CASE

The Supreme Court has let stand a ruling that Spain owns the remains of two of its warships lost off the Virginia coast in the 18th and 19th centuries. The move means Spain can block salvage of the vessels, thought to be within the boundaries of Assateague Island National Seashore.

Virginia owns the bottomlands where the wrecks may reside, and in 1997 granted Sea Hunt, Inc., permits to salvage. The state's ownership claim, made under the Abandoned Shipwreck Act, was based on implied abandonment by Spain, since the vessels were so old (under the act, states receive title if a wreck is abandoned and is on, or in, their submerged lands).

La Galga wrecked in 1750, *Juno* disappeared at sea in 1802, both victims of severe weather. Upon learning that Virginia had issued salvage permits, Spain sent a diplomatic note to the United States protesting the distur-

"La Galga wrecked in 1750, *Juno* disappeared at sea in 1802 . . . Upon learning that Virginia had issued salvage permits, Spain sent a diplomatic note to the United States."

bance of military graves. Litigation began when Sea Hunt and Virginia refused to respect Spain's wishes and Sea Hunt secured salvage rights in district court.

The same court ruled that *La Galga* was abandoned based on the 1763 treaty that ended the Seven Years War, which transferred property from Spain to Britain, the victor, although no basis was provided for a chain of title from Britain to Virginia.

The court also ruled that Spain owned *Juno* based on an 1819 treaty among European powers.

On appeal, the Fourth Circuit determined that both wrecks fall under the 1902 Treaty of Friendship and General Relations between the United States and Spain. That treaty established "reciprocal immunities" to protect shipwrecks and military gravesites; accordingly sovereign vessels can only be abandoned by expressed intent. Similarly, the court noted, sovereign vessels do not fall under the Abandoned Shipwreck Act unless they are expressly abandoned by the nation who owns them.

In a memorial ceremony aboard a Spanish Navy vessel at Norfolk, ambassador of Spain Javier Ruperez called the U.S. government effort "a gesture of friendship and solidarity."

EMBASSY OF SPAIN

Above: Ambassador of Spain Javier Ruperez in a memorial ceremony aboard a Spanish Navy vessel docked at Norfolk. Remembering those who perished, he said: "Today their memory is with us more than ever . . . and will remain alive." Spain and the Park Service are developing a cooperative program to manage the wrecks and care for artifacts recovered by the salvor.

U.S. ACTS TO DEFEND ITALY'S HERITAGE

MOVE AIMED AT ILLEGAL ANTIQUITIES TRADE

The United States has imposed import restrictions on a wide range of Italian archeological items in an attempt to stem the illicit antiquities trade between the two nations. This country is believed to be the largest market for antiquities that are illegally excavated in Italy.

The restrictions cover some of the most-collected materials, spanning, roughly, the pre-classical period to the fall of Rome (the 9th century BC to the 4th century AD). A list of restricted items, published in the *Federal Register*, includes a wide variety of sculpture, vessels, ornaments,

weapons, and armor. The bilateral agreement requires that antiquities coming into the United States must be accompanied by documentation that they left Italy legally.

The agreement also calls for Italy to increase vigilance over its archeological sites and antiquities trade. The country has over 500 major sites, most of which are guarded. Nonetheless, looting remains a problem.

The restrictions were imposed under the 1970 UNESCO convention aimed at prohibiting illegal trafficking in cultural property.



Left: Greek terra cotta figurine from a Sicilian site dating to the 3rd century BC, one of the types of artifacts protected under the U.S.-Italy agreement.

MALCOLM BELL

COURT OF APPEALS RULES ON WW II PLANE

RARE BOMBER REMAINS NAVY PROPERTY

The 11th Circuit Court of Appeals has ruled that the U.S. Navy can bar salvage of a rare WW II aircraft submerged off the coast of Florida, dashing the hopes of a vintage airplane collector to raise it. Doug Champlin, owner of Champlin Fighter Aces Museum in Mesa, Arizona, appealed the decision to the U.S. Supreme Court, which declined to hear the case.

The TBD-1 Devastator, a torpedo bomber, went down eight miles from Miami Beach during a 1943 training flight. The plane had flown in the battle of Coral Sea and at Midway. Only 130 were built, and the wreck in question is believed to be the only one left.

The plane was unexpectedly discovered in 1990 by treasure hunters searching for Spanish galleons. They sold the location to Champlin, who videotaped the wreck, recovering the radio mast and part of the canopy. Over the federal government's objection, he filed a motion in U.S. district court for exclusive salvage rights, which were granted. The government appealed.

In July, the appeals court reversed the ruling. The court cited the property clause of the U.S. Constitution, which says that the federal government cannot abandon property without congressional authorization. Military shipwrecks and aircraft belong to the armed services no matter where they are or how long they've been there. The court also ruled that as owner of the Devastator, the Navy has the right to refuse salvage. The question of whether Champlin will be reimbursed for the more than \$130,000 he has spent was remanded to the district court.

Left: Artist's rendition of Navy Devastators in flight.



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JOHN RICHARDSON

INTENT ON TRIAL IN KEY CASE

LOOTER ARGUES GOVERNMENT MUST PROVE HE KNEW SKULL WAS "ARCHEOLOGICAL RESOURCE"

On a hunting trip to Alaska's remote Heceta Island,

23-year-old Ian Lynch went looking for artifacts in what he thought might be an old burial ground on federal property. Discovering partially exposed human remains, he excavated the skull of a Native Alaskan, 1,400 years old. Was it just innocent curiosity? The question has been reverberating through the federal court system and the archeological community; some observers fear a legal precedent that could have a chilling effect on prosecuting violators of the Archaeological Resources Protection Act.

The government charged Lynch with a felony under the statute. In a plea bargain that kept the case from trial, he was fined \$7,500 and sentenced to three months in prison. Lynch reserved the right to appeal one issue, however. He argued before the U.S. Court of Appeals for the Ninth Circuit that the government had to prove he knew the skull was an "archaeological resource" as defined by the law (which says that material remains must be at least 100 years old and "capable of providing scientific . . . understanding of past human behavior . . ."). The court agreed, calling Lynch's conduct akin to "a Boy Scout who finds an arrowhead along a trail." Now, in the ninth circuit—the nation's largest—the government must prove that someone knows an object is an archeological resource to be convicted under the statute. It marks the first time a defendant's knowledge has come before a court in an ARPA case.

Observers were confounded that the court did not discuss two precedents, *U.S. v. Gerber*

and *U.S. v. Tidwell*. In *Gerber*, a criminal ARPA case, the Seventh Circuit (covering Wisconsin, Illinois, and Indiana) held that "[T]here is no right to go on another person's land, without permission, to look for valuable objects and take them if you find them." The government established that Lynch knew he was on someone else's land and had removed something that did not belong to him. If the Ninth Circuit had adopted this reasoning, the burden of proof would have been satisfied.

Above: Pottery fragments. The difference between an object of curiosity and a federally protected archeological item—or, more precisely, proving that someone knows the difference—is at the heart of the case.

In *Tidwell*, the Ninth Circuit heard the case of a dealer in Native American art convicted of violating both ARPA and the Native American Graves Protection and Repatriation Act. The dealer, Rodney Tidwell, argued that the evidence was insufficient and that NAGPRA was unconstitutionally vague about what items it aims to protect. In affirming his conviction, the Ninth Circuit ruled that, as someone knowledgeable about Native American art, Tidwell should have known

The court [called his] conduct akin to "a Boy Scout who finds an arrowhead along a trail."

it was unlawful to traffic in certain items, and, even if he were unsure, he knew enough to inquire. Similarly, Lynch claimed to be a student of Alaskan Native culture, familiar with its burial practices. Because the Ninth Circuit never discussed *Gerber* and *Tidwell* in the Lynch case, the question of how, or whether, the court distinguished Lynch from these other precedents remains a question.

Observers say the Ninth Circuit focused only on whether Lynch knew the skull's age, ignoring the other characteristics that define an archeological resource, such as its potential to enhance scientific understanding. Lynch, according to the government, likely knew the skull was such an item.

In making its decision, the Ninth Circuit remanded the case to the lower court for a rehearing. Rather than face trial anew, Lynch pled guilty to a lesser charge (a misdemeanor under ARPA) with the same sentence.

The Ninth Circuit's reasoning, however, may loom large in the future. Several groups and attorneys urged the U.S. Solicitor General to let the district of Alaska appeal, but were refused. Observers fear Lynch alters ARPA by misinterpreting the criminal intent element, making convictions more difficult. It is insensitive to Native American interests, they say, potentially hindering prosecutions under NAGPRA and natural resource statutes with criminal intent provisions.

AWARDS

Wayne Dance, Assistant U.S. Attorney for the district of Utah, has received a Justice Department award for his work prosecuting archeological crimes. With 37 successful prosecutions—the most nationwide—Dance is a leader in archeological protection cases.

Dance also received the Society for American Archaeology's Public Service Award in recognition of his legal accomplishments. Also recognized for their outreach and protection efforts were the University of Alabama's Ian Brown, chairman of SAA's national landmarks committee, and the law department of the National Trust for Historic Preservation.

The SAA Gene S. Stuart Award went to reporter Mike Toner of the *Atlanta Journal-Constitution*. The award, for outstanding achievement in enhancing public understanding, acknowledged Toner's six-part series, "The Past in Peril," which documented threats to archeological sites around the world.



THE OLD CHARLESTON NAVY BASE is a sprawl of aging warehouses, storage tanks, and elevated pipelines. Despite its size, and for all the suggestion of activity, it is strangely quiet. The parking lots are all but deserted. Mothballed ships lie still at dockside. The Navy moved out in 1995, and the place has been quiet since. But in a plain white structure set back off the main road, events are unfolding that have captured the world's attention.

**A CONFEDERATE SUBMARINE JOURNEYS
FROM SEA FLOOR TO STUDY LAB**

raising the Hunley

Left: A diver from the recovery team hits the water. **Right:** Detail from an oil painting of the Hunley in December of 1863 by Conrad Wise Chapman.



by joseph flanagan

Inside, the setting is a cross between industrial functionality and clinical precision. The uninformed visitor might not understand what is happening here. Surrounded by freshly painted steel and blinking computer equipment, an enormous oblong object the color of earth is suspended in a series of padded nylon straps. It is the focus of what has been called one of the greatest underwater archeological projects ever undertaken, the Confederate submarine *Hunley*.

Since it was raised from 30 feet below the sea four miles off South Carolina's Sullivan's Island, the *Hunley* has been the subject of international media attention, a sensation to historians, Civil War buffs, and legions of the curious. Almost every aspect of its story, from the vessel itself—one of the most dramatic innovations of its time and the first sub to sink an enemy ship—to its resurrection from the sea, to the investigation now going on, are singularly unique.

The isolated warehouse where the work is taking place has been converted into a 6,000 square foot, 3 million dollar state-of-the-art conservation facility built expressly for the *Hunley*. It includes not only the tank holding the sub, but a modern lab and a morgue to examine and treat the remains of the men who perished with the vessel in 1864. Much of the technology, such as X-ray equipment and video scopes, has been donated by businesses such as Fuji and 3M. The lab was constructed with flexibility in mind, since nothing quite like this project has ever been attempted. In fact, new techniques are being developed as work proceeds. Much of the equipment is mobile so it can be moved about as conservation unfolds.

At this writing, archeologists have removed four of the *Hunley*'s hull plates as they painstakingly excavate the hard-packed silt that fills the sub, accounting for a good part of its 23 tons. Examining the contents of the vessel—which has been described as a time capsule—is

Into the Cradle

A 1996 excavation of the site showed that the *Hunley* was intact, its interior filled with sand and seawater. The exterior was covered with marine growth and encrustation. To protect the vessel while lifting its considerable heft, a steel truss was designed and built to be lowered over it, with the sub strapped inside for the trip to the surface.

Two suction pilings were sunk into the sea floor near the sub's bow and stern. The pilings, designed so as not to disturb the *Hunley*'s remains, served as a foundation for the truss. The piles were sunk about 12 feet below the sea bottom.

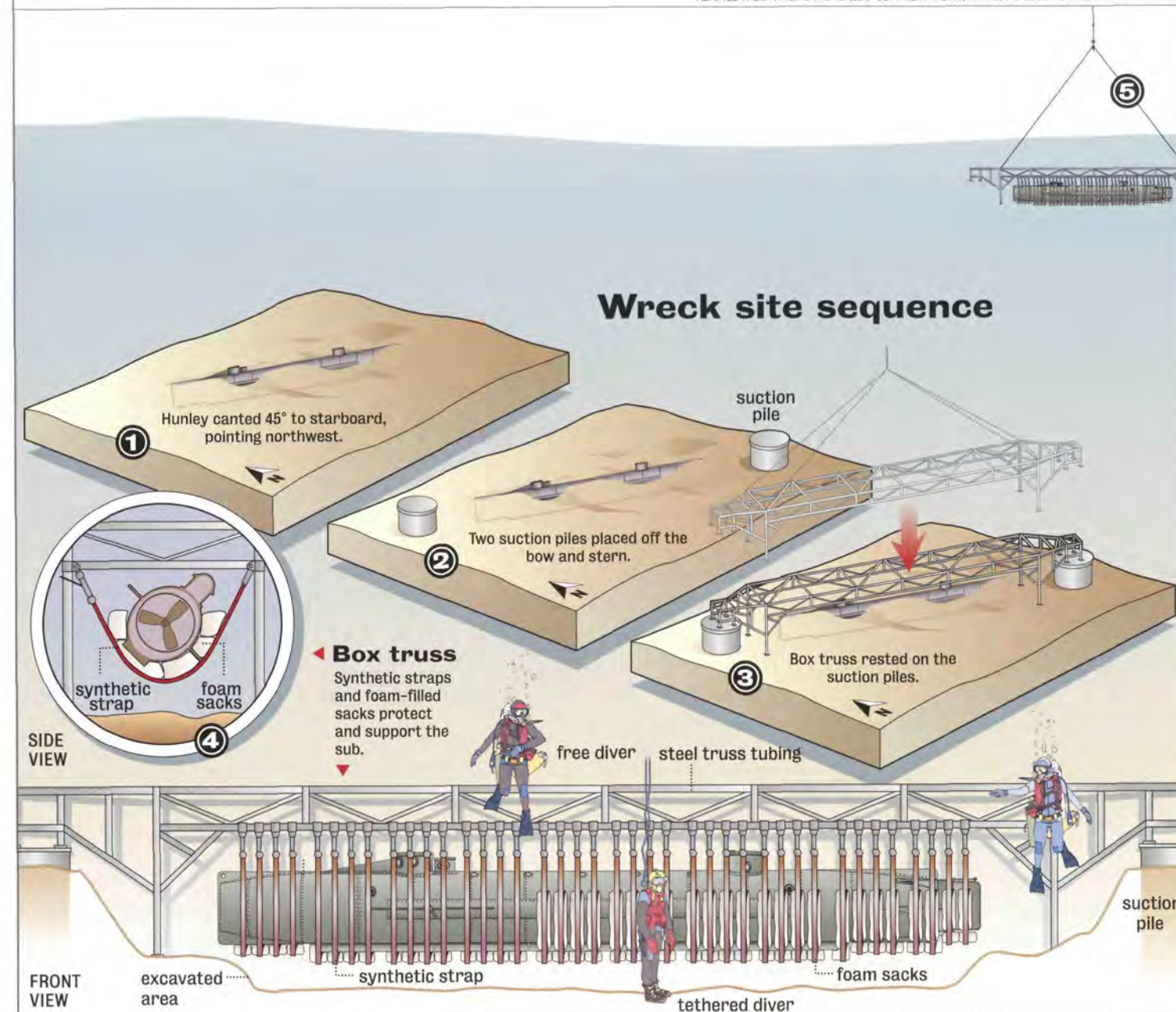
The truss had extensions on each end, which rested on top of the suction pilings. Built of steel tubing, the truss had an open bottom so it could be carefully guided into place. The sea floor around the wreck was carefully excavated to recover any artifacts.

Synthetic straps were looped underneath the hull and connected to the top of the truss. Researchers estimated that about 40 straps were needed to attach the sub. Plastic sacks were placed between the hull and the straps. Foam injected in the sacks created a mold around the hull to support and brace the *Hunley* during recovery.

The sub was canted 45 degrees on its starboard side. The straps and sacks allowed the vessel to be lifted without having to right it, lessening the chance of damaging the fragile hull. In essence, the synthetic straps, foam sacks, and steel truss formed a protective box around the *Hunley*.

A sling—attached to each corner of the truss—was connected to a cable from a crane on the recovery barge. The *Hunley*, encased in the truss, was winched to the surface to see the light of day for the first time in over a century. Once aboard, the truss was chained on deck for the trip to the conservation facility, a converted warehouse at the old Charleston Navy Base. On arrival, the sub was immersed in a tank of chilled water to inhibit deterioration.

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CLAIRE PEACHEY/NPS, BRETT SEYMOUR/NPS, COURTESY FRIENDS OF THE HUNLEY

the latest in a remarkable chain of events that began in May of last year, when the recovery team converged on the staging point, Fort Moultrie (a unit of Fort Sumter National Monument). The television networks, magazines, and newspapers picked up the story; a made-for-TV movie had already aired about the sub's historic engagement

Above left: The Mark's Tide was the seaborne work platform for recovering the *Hunley*. **Above right:** Field manager Dave Conlin of the National Park Service works at the diver communication station.



Left: After over a century on the ocean floor, the submarine rests in its custom steel truss and slings.

with the Union ship *Housatonic*, when both vessels went down. The *Hunley* had everything: the Civil War, a secret weapon, a mysterious sinking, an amazing undersea find.

But remarkable events had been unfolding since the sub was located in 1995. The settings were less dramatic—government offices and conference rooms—but the cooperation has reached a level rarely seen in archeology or preservation. The South Carolina Hunley Commission, the U.S. Navy, the National Park Service, and the South Carolina Institute of Archaeology and Anthropology have all played crucial roles. The recovery has inspired a surprising array of people, organizations, and agencies to contribute the best they have to offer, and to act as one (see sidebar, page 18).

without disturbing what it holds? How to excavate the silt without its slumping or moving? Would the *Hunley*, whose skin is a series of riveted plates, hold together if moved? To help his audience visualize the plan, Wright conjured up the image of “a camera case with a custom, foam-fitted support.”

Oceaneering proposed lowering two massive, 18-by-12 foot suction piles at either end of the sub. Since they would be anchored to the sea floor by suction, rather than driven in like conventional

“In its 136 years on the sea floor, the *Hunley* established a delicate equilibrium of preservation. As its iron hull oxidized in the salt water, a hardened layer formed around it.”

The South Carolina legislature established the Hunley Commission to represent the state’s interests in the sub, ensure its protection, and examine the possibility of recovery. The commission assembled a team of archeologists and conservators—most employed by the College of Charleston and South Carolina Archives and History, working through the not-for-profit Friends of the Hunley—to handle the project.

Bob Neyland, head of the Naval Historical Center’s underwater archeology branch, was appointed to lead the team. From the outset, they knew this much: A few miles off shore lay an archeological Holy Grail, and though the *Hunley* team stood at the exhilarating juncture of fact and unprecedented possibility, the void between the two appeared unbreachable.

OUT OF THE DEEP

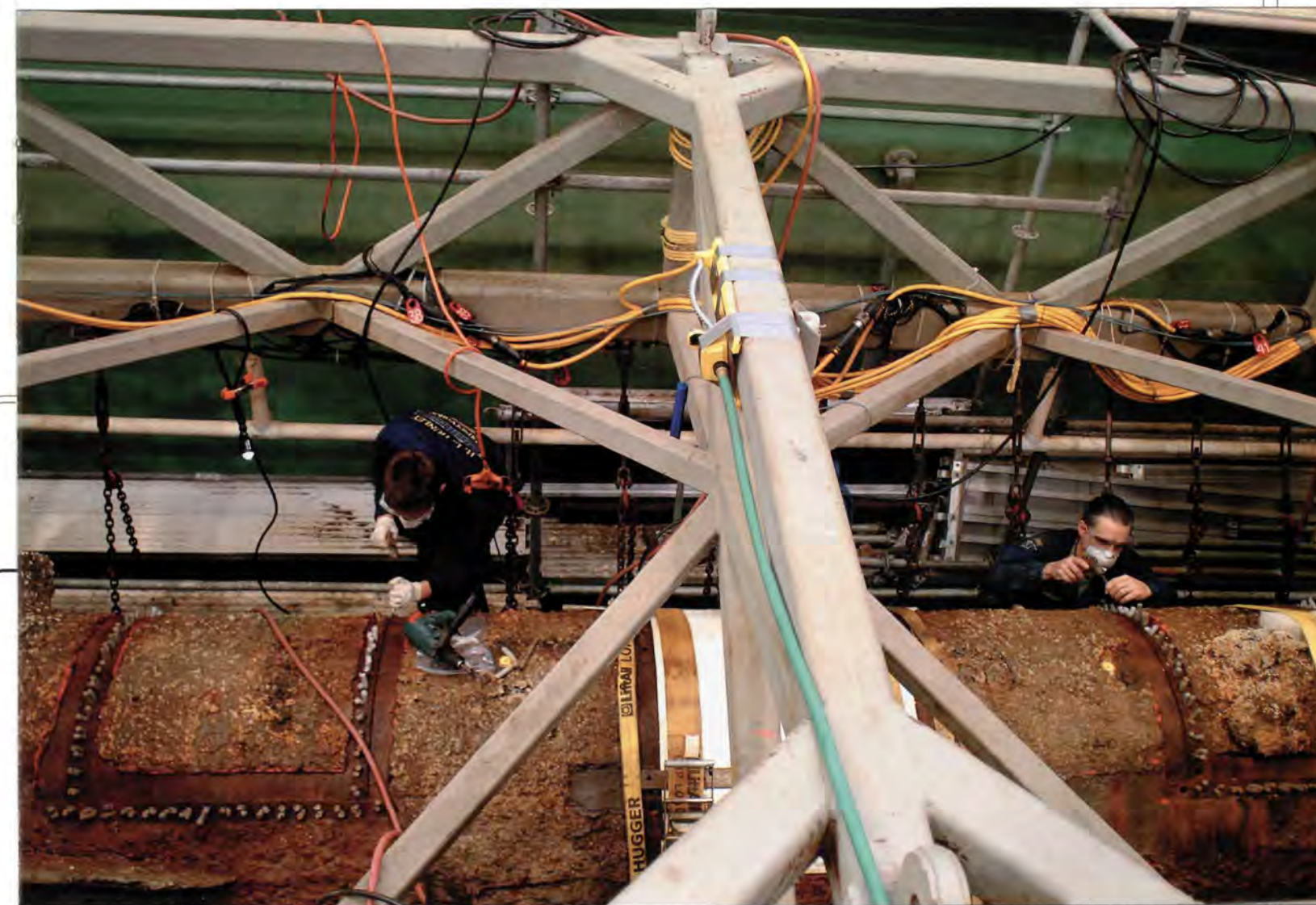
In the summer of 1999, Steve Wright of Oceaneering International Advanced Technologies stood before an audience of archeologists, curators, and historians at the Naval Historical Center in Washington D.C. His firm, a prospective subcontractor, had a plan for raising the *Hunley*. Oceaneering’s portfolio included projects you don’t typically see from engineering firms, among them recovering the *Liberty Bell 7* space capsule and the propeller of the Civil War ironclad *Monitor*.

There were many concerns about the *Hunley*, most borne of the paradox that it is a delicate 23-ton artifact. How to raise the sub

piles, disturbance to the site would be minimized. The piles would serve as the platform for a large steel box, or truss, that would be lowered over the *Hunley*. Divers would then excavate the sediment in small sections around the vessel. Custom-made slings would be passed beneath the underside of the sub, attached to the truss by chains. Each sling, made of nylon and surrounded by a sleeve filled with sprayed-in styrofoam, would be connected to a “load cell,” or sensor, that would inform a computer at the surface how much weight the sling held, and detect any movement.

In theory, there would not be a moment when the vessel was unsupported. With enough sediment cleared away, the truss, with the *Hunley* suspended within, could be lifted from the sea by a crane on a barge above.

A 1996 investigation by the Park Service, the Navy, and the South Carolina Institute of Archaeology and Anthropology indicated the idea was feasible. Non-invasive tests of the *Hunley*’s hull suggested the vessel was stable enough to be lifted. Amid all the discussion of physics and heavy objects, Wright observed that “there is no point where it switches from an archeology effort to a recovery effort. This whole thing, from beginning to end, is archeology.”



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Above: Archeologist Harry Pecorelli and intern conservator Paul Mardikian work on removing hull plates.

As the plan took shape, interest grew. “Every day someone came into my office to get on the *Hunley* project,” said Wright. “I was turning people away.”

When the team set out from its staging area at Fort Moultrie, it included underwater archeologists from the NPS Submerged Resources Center, known for its groundbreaking work on wrecks around the world. Among its many projects, the center had done detailed surveys of the battleships *Arizona* and *Utah* at Pearl Harbor and worked with French archeologists on the Confederate raider *Alabama*. The center’s archeologists were involved with the

Hunley early on, and with the expedition poised to raise the sub, they again figured prominently. The dive crew, which numbered 19, was supervised by Dave Conlin of the Park Service (on detail to the Naval Historical Center) who served as field director. It also included archeologists and divers from SCIAA, the Navy, and Oceaneering International.

For the next four months, two teams did 12-hour shifts in the water, with a *National Geographic* film crew on hand. Live images from the bottom revealed a monochromatic world of swirling brown, with bits of shell and debris giving witness to what archeologists called the “dynamic environment” of swift currents and shifting sand. “Pitch black” is how Conlin described it. “You couldn’t even see your hand in front of your face.”

Remarkable Teamwork

The discovery of the Hunley set in motion a remarkable display of cooperation. Six state and twelve federal agencies have contributed their expertise and resources. The U.S. Navy has been the lead agency; others include the Hunley Commission, the South Carolina Institute of Archaeology and Anthropology, South Carolina Archives and History, the General Services Administration, the National Park Service, the Smithsonian Institution, the National Oceanic and Atmospheric Administration, the Army Corps of Engineers, and the President's Advisory Council on Historic Preservation. South Carolina businessman Warren Lasch was pivotal in making it all happen.

A team assembled by novelist and amateur archeologist Clive Cussler—working with the South Carolina Institute of Archaeology and Anthropology—located the sub; the marine engineering firm Oceaneering International Advanced Technologies devised a method to raise it.

Although the Navy retains title of the vessel (Confederate property reverted to the federal government at war's end), South Carolina will manage the Hunley in perpetuity.

The cost has been met with the same spirit of partnership. South Carolina has contributed \$4 million, the Department of Defense \$3 million (with another \$900,000 expected), businesses and individuals \$4 million; NPS and SCIAA have donated invaluable time and equipment. The National Geographic Society, which has filmed and photographed throughout, has donated an undisclosed sum.

Divers on the night crew claimed to have an easier time of it. With their eyes adjusted to the dark, the roiling sediment was not as impenetrable. The suits they wore seemed more designed for space travel than diving; still, what one archeologist described as “a slurry of jellyfish” stung exposed body parts.

Debate arose over what to do with the Hunley's spar—a length of iron used to deliver the sub's explosive charge—which was still attached to the bow with a large nut. There was concern it could be damaged during the lift. The assumption was it had to be cut off after so many years of rust. Brett Seymour of the Park Service descended with a wrench and, to everyone's surprise, simply did the reverse of what the sub's builders did: backed the nut off and freed the spar.

On August 8, 2000, the Hunley was hoisted to the surface intact, canted in its slings at the same 45-degree angle in which it came to rest on the ocean floor more than a hundred years ago. Accompanied by media boats and an armada of onlookers, it began its four-hour journey to the conservation center.

UNDER THE EYE OF SCIENCE

Bracing himself within the framework of the Hunley's truss, a photographer from *National Geographic* prepares to capture one of the most anticipated events of the submarine's recovery. The rivets securing a plate in the vessel's midsection have been drilled out; archeologists are preparing for their first look inside. A camera crew films from a rolling platform overhead. Flashes go off around the work area, which, but for the archeologists' voices and the occasional sound of metal on metal, is surprisingly quiet.

The importance of each step is conveyed by impromptu conferences at one end of the tank. Arrayed around the submarine are a handful of high tech work stations, clusters of computer equipment, screens, and other hardware where technicians tap keyboards, watch monitors, and take notes with a quiet sense of purpose.

All this is visible from an elevated viewing area, where a large window offers a view of the tank, the sub, and the work platform. Access is highly restricted, evidenced by the constant presence of South Carolina state troopers. For the most part, visitors observe on large screens in an adjacent room, which houses a gift shop selling memorabilia and props from the TV movie. Proceeds go directly to the project.

In its 136 years on the sea floor, the Hunley established a delicate equilibrium of preservation. As its iron hull oxidized in the salt water, a hardened layer formed around it. The process, known as concretion, is the result of complex microbial and electrochemical reactions. It actually serves as the best protection for the sub and its contents, preventing exposure to oxygen. The vessel's near-total burial in silt—virtually oxygen-free—provided another safeguard.

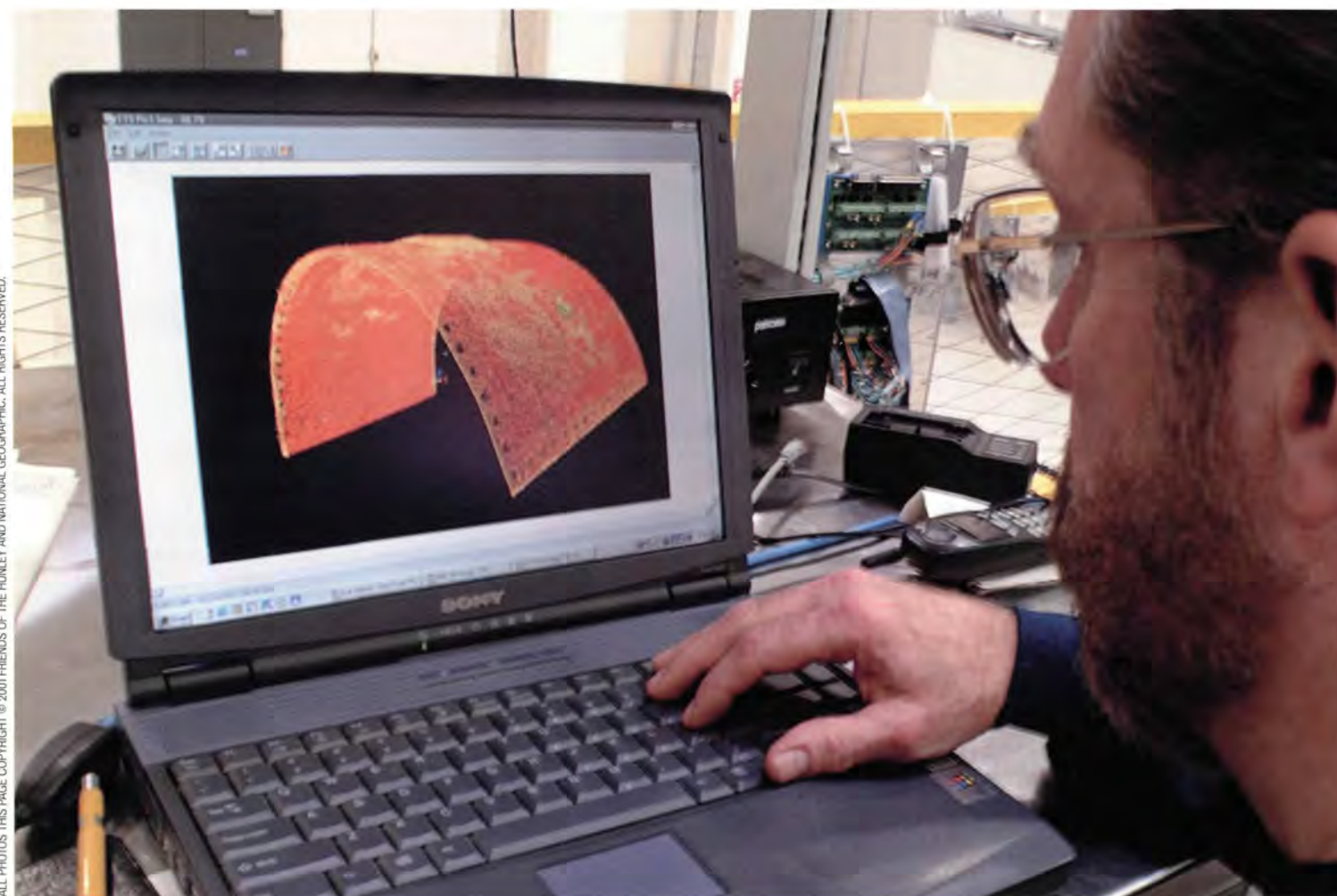
Disturbing the concretion could be disastrous. Chlorides from the seawater, reacting with oxygen, would start rapid oxidization. If not properly stabilized, the Hunley could suffer more corrosion in six months than it had in well over a century. Keeping the concretion intact was one of the things that made the recovery so complex. When the sub was raised, archeologists noted “not a single crack” in its protective shell.

Though chemical inhibitors can stem corrosion, this was not an option due to the vessel's fragile contents and concern for the researchers' safety. As soon as the Hunley arrived, it was placed in a custom tank filled with fresh water, then refrigerated for

Right: The submarine's first hull plate is removed.



Right: Doug Devine of Pacific Survey looks at a laser scan image of one of the plates.



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A submarine prototype

Formed from an iron steam boiler, with a tapered bow and stern, the Hunley became the prototype for submarine design well into the 20th century. This illustration is based on excavations at the wreck site and on plans for a replica from the movie "The Hunley."

Hunley's exterior shape resembles a cigar, with two conning towers and a snorkel box on top and a five-section iron keel ballast along the bottom. The towers, fitted with hatches, had portals on the port side only. Five pairs of deadlights ran along the top of the hull between the towers. A hand-cranked propeller provided propulsion, while the diving planes and rudder were used to navigate. The interior had bulkheads fore and aft, which formed the two ballast tanks that defined the cramped crew compartment.



Forward bulkhead

- 1 Shelf and compass
- 2 Candlestick
- 3 Depth gauge
- 4 Dive planes handle
- 5 Bilge pump
- 6 Seacock

Crew compartment

- 1 Seacock
- 2 Bilge pump
- 3 Dive plane
- 4 Portal
- 5 Snorkel (never worked)
- 6 Deadlights
- 7 Hand crank
- 8 Support bracket
- 9 Flip-up seats
- 10 Ballast release bolt

Aft hatch and conning tower

Aft ballast tank

Aft bulkhead

- A Hand crank gear
- B Hand crank
- C Propeller shaft gear
- D Tiller
- E Seacock
- F Bilge pump

Hunley's measurements

Length:
39 feet 5 inches
Beam:
3 feet 10 inches
Depth:
4 feet 3 inches
Hull:
3/8 inch iron boiler plate



Rudder and propeller

- Tiller rod 1
- Lateral brace 2
- Propeller shroud 3
- Propeller 4
- Rudder 5

Forward hatch and conning tower

Captain

Crew

Forward ballast tank

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Inside the Hunley

INFORMATION BASED ON EXCAVATIONS AT THE WRECK SITE AND ON PLANS FOR A REPLICA FROM THE MOVIE "THE HUNLEY."

Above: Excavating compacted silt from the submarine's interior.

several days to inhibit algae and fungi. Ensuring the delicate stabilization is the task of the Friends of the Hunley conservators, who monitor the water's pH, temperature, chlorides, oxygen levels, and conductivity. It is a computerized process, accomplished with custom technology provided by private industry. A cathodic protection system—a series of wires running along the tank's interior—emits a current that inhibits corrosion. The *Hunley* is submerged over the weekend when no work is done. The rest of the time, it's kept wet overnight with lawn sprinklers.

Besides the remains of the crew, archeologists expect to encounter artifacts of glass, tin, leather, wood, ceramics, and

cloth. Stabilizing them will pose a host of challenges, and it could take years before they can be handed over to a museum.

THE HUNLEY IN 3-D

For days before the rivets are extracted, technicians from Pacific Survey, Inc., have been moving along the scaffold that surrounds the *Hunley*, carefully positioning a gray box at various places along the sub's length. Through an aperture at the box's center, laser impulses are constructing, bit by bit, a three-dimensional picture of the vessel, rendered as a ghostly red image on a computer screen about 20 feet away. Recording interconnected reference points on the *Hunley*, technicians create a "point cloud" conforming to the

sub's shape. Modeling software "shrink wraps" the vessel in cyberspace, says one technician—to an accuracy of one millimeter. It is slow and tedious work, but critical to determining how the *Hunley* is responding to the removal of the rivets. Gamma ray technology is used to see how the plates were assembled and structural members attached.

Virtually everything is photographed, recorded, and entered into a database designed by the Space and Naval Warfare Systems Center. It is a precise, exhaustive record down to the smallest detail. Every bucket of silt is numbered and dated. Any artifact can be traced back to its bucket and from there to a part of the vessel. Daily work summaries can be generated, and rolls of film—even

individual photos—can be precisely tracked. Even drilled-out iron shavings are bagged and identified, traceable to a specific rivet and where it was removed. It is the first tracking system of its kind used on an archeological project, the technicians say.

FIRST LOOK INSIDE

News that the first plate is about to be removed has gotten out. From Web cameras positioned around the work area, Internet users can observe the work in progress. Soon, there are so many hits the site can no longer be called up.



Though the place is crowded with some of the most sophisticated equipment ever used on an archeological project, the team must resort to its indispensable low-tech instruments: flat bars and prying tools. They coax the plate loose, revealing the compacted, claylike fill, the “matrix” in which the remains of the crew and their effects are suspended.

The following weeks reveal the secrets—at times mundane, on occasion stunning—that have been hidden within the submarine for over a century. Textiles (possibly the crew’s clothing) are removed in blocks of sediment. Archeologists find buttons, a sewing kit, a tobacco pipe, a glass bottle. There was also the somber and inevitable discovery of the eight crew members, and the baffling fact that a Union soldier’s identification tag was found among them. Had Ezra Chamberlain, a Connecticut volunteer, defected from the Union to the Confederacy? Had his tag been taken by a crew member of the sub as a souvenir from an earlier battle?



the vessel into the hands of a centralized government—in a time when their sense of independence was acute. The *Hunley* also bears witness to socioeconomic change. Though the project was financed by the plantation elite, the technology was developed by southern industries run by an emerging middle class.

The remains of the crew will be analyzed by scientists from the Smithsonian, their facial features reconstructed with the aid of computer software. Ultimately the crew will be buried in Charleston’s Magnolia Cemetery, alongside those who died during trial runs. Once the restoration of the vessel is complete—expected to take anywhere from seven to ten years—it will go on display at the Charleston Museum.

Far from ending on a February night in 1864, the story of the *Hunley* has become a continuing saga, one in which the vessel continues to exceed its reputation as an artifact. The project has

“Far from ending on a February night in 1864, the story of the *Hunley* has become a continuing saga, one in which the vessel continues to exceed its reputation as an artifact.”

Finally, there was the sensational discovery of the gold coin that the *Hunley*’s skipper, Lieutenant George Dixon, carried with him. A keepsake from his girlfriend, the coin was dented by a bullet during the battle of Shiloh, saving him from injury. As the work continues, more surprises will undoubtedly be discovered. “The excavation will be comparable to reading a good mystery book,” says South Carolina Senator Glenn McConnell, chairman of the *Hunley* Commission, “with each day being a new page revealing more about the characters and uncovering more of the clues to solving the mystery of what happened on the final voyage.”

Left: Maria Jacobsen with the gold coin
Lt. George Dixon carried to his death on the *Hunley*.
Above: Dixon’s coin was dented when he was shot at Shiloh; he later had it engraved with the words, “My life preserver.”

PLUMBING HISTORY’S DEPTHS

Beyond the human drama and technological achievement, other aspects of the story bear witness to the Civil War era. Several southern states contributed to the *Hunley*’s design, construction, and operation, ultimately to deliver

served as a blueprint for federal-state partnerships, while realizing the rich potential for private involvement in preservation. Though stilled now in its steel cradle, the *Hunley* exerts a far-reaching influence on how we embrace the past. In the words of Warren Lasch, chairman of Friends of the *Hunley*, “[It] is becoming more and more a human story and less a war story.” In recovering the vessel, administrative barriers dissolved, the line between interests blurred. Undoubtedly many things united the parties. But hovering above it all, in one way or another, was the idea that this was owed to the men of the *Hunley*. Words like “respect” and “dignity” are just as much a part of the project’s vocabulary as technical jargon. Hanging from a steel column in the conservation center is a small, framed list of the crews’ names under the words, “In Memoriam.” It lacks formality, in fact it seems intentionally discrete and personal. Yet it speaks volumes about the transcendent thing that lies at the heart of preservation: our enduring desire to embrace the human experience.

For more information on the project, go to the Friends of the *Hunley* website at www.hunley.org.

threat to

KNOWLEDGE

THE NATIONAL PARKS have long played a leading role in advancing archeological research, says Bill Lipe, noted scholar and past president of the Society for American Archaeology. Today, however, he believes the agency's preservation successes may threaten the flow of knowledge and, ironically, the reason for saving sites in the first place.

"When a building is preserved," he says, "it stands as a highly public representation of

the qualities that make it worth preserving. For most archeological sites, preservation is only the starting point." He believes that study, including judicious excavation, is essential to realizing a site's information potential, and hence its value to the public. Since digging destroys sites, however, the idea strikes at the very heart of preservation.

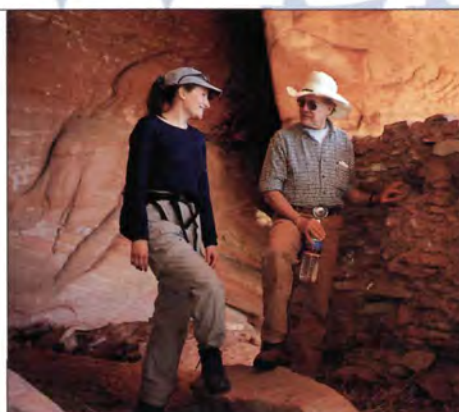
In the 1950s, sites were often completely dug up, sometimes yielding only a brief report with little possibility for more. Today, however, the "sherd-to-word ratio" is far better, so that much more can be learned from a smaller slice of earth. Despite these advances, he believes, little or no excavation is being conducted in most parks; as a result, information is going out of date. For comparison, Lipe points to current work at Crow Canyon Archaeological Center (a private research center in Colorado) which is spawning a sizable literature based on excavating less than one percent of a few sites in the region.

"I realize it's easy for me to sit outside the parks and pontificate about it," says Lipe, while lauding recent Park Service research projects. The problem, he says, is encouraging more of them.

Here he discusses the far-ranging implications for all our public lands—and beyond.

COMMON GROUND: Why is archeological research on public lands important?

LIPE: The people of the past are gone, the words they spoke and the things they did, but the artifacts that shaped their lives are still here, and stand as a direct link between us and them. When I take people to Mesa Verde or Chaco, they want to know whether a wall or building is real or restored. In Britain it makes a huge difference to realize that a wall was once part of a Roman fort. Research makes these connections. The earliest stone tools are



KARI CHALKER, CROW CANYON ARCHAEOLOGICAL CENTER

*research and the future
of archeology in the
national parks*

**an interview
with noted
archeologist
bill lipe**

**photographs
by will lipman**

*"When a building is pre-
served, it stands as a highly
public representation of the
qualities that make it worth
preserving. For archeological
sites, preservation is only the
starting point."*

Above: Bill Lipe stands in front of a Pueblo masonry wall in Moqui Canyon, Glen Canyon National Recreation Area.

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Previous page, opposite: Defiance House, given its name by Lipe in 1959, is the most heavily visited archeological interpretive site in Glen Canyon National Recreation Area.

“The earliest stone tools are mere lumps of stone. But knowing they are two million years old is a telling fact. This kind of authenticating information seldom is self-evident.”

mere lumps of stone. But knowing they are two million years old is a telling fact. This kind of authenticating information seldom is self-evident. Yes, written history and oral tradition provide ways of knowing the past, but archeology has its own voice.

COMMON GROUND: How does preservation affect the issue?

LIPE: I believe there are problems in how preservation is being carried out in most federal agencies. These problems are rooted in the social value of archeological sites, and in the way preservation programs deal with that.

Archeology's main contribution to society is producing and disseminating information based on systematic study of what's left in the ground. Most sites gain value according to their potential to contribute knowledge. Therefore, one measure of a preservation program's success is whether anything useful is learned.

Excavation is one of the main ways we go about learning.

No question, excavations must be frugal. Digging destroys sites. Nevertheless, what justifies preservation is the ability to use the

archeological record to gather new information. Archeology is more than excavation, but an archeology without excavation cannot fulfil its social role.

Sometimes our zeal to be good preservationists, and follow the letter of the law, undercuts why we're protecting sites to begin with. We need to consider both the means—preservation—and the ends—understanding—and not assume one will take care of the other.

COMMON GROUND: What's the research role of the Park Service as you see it?

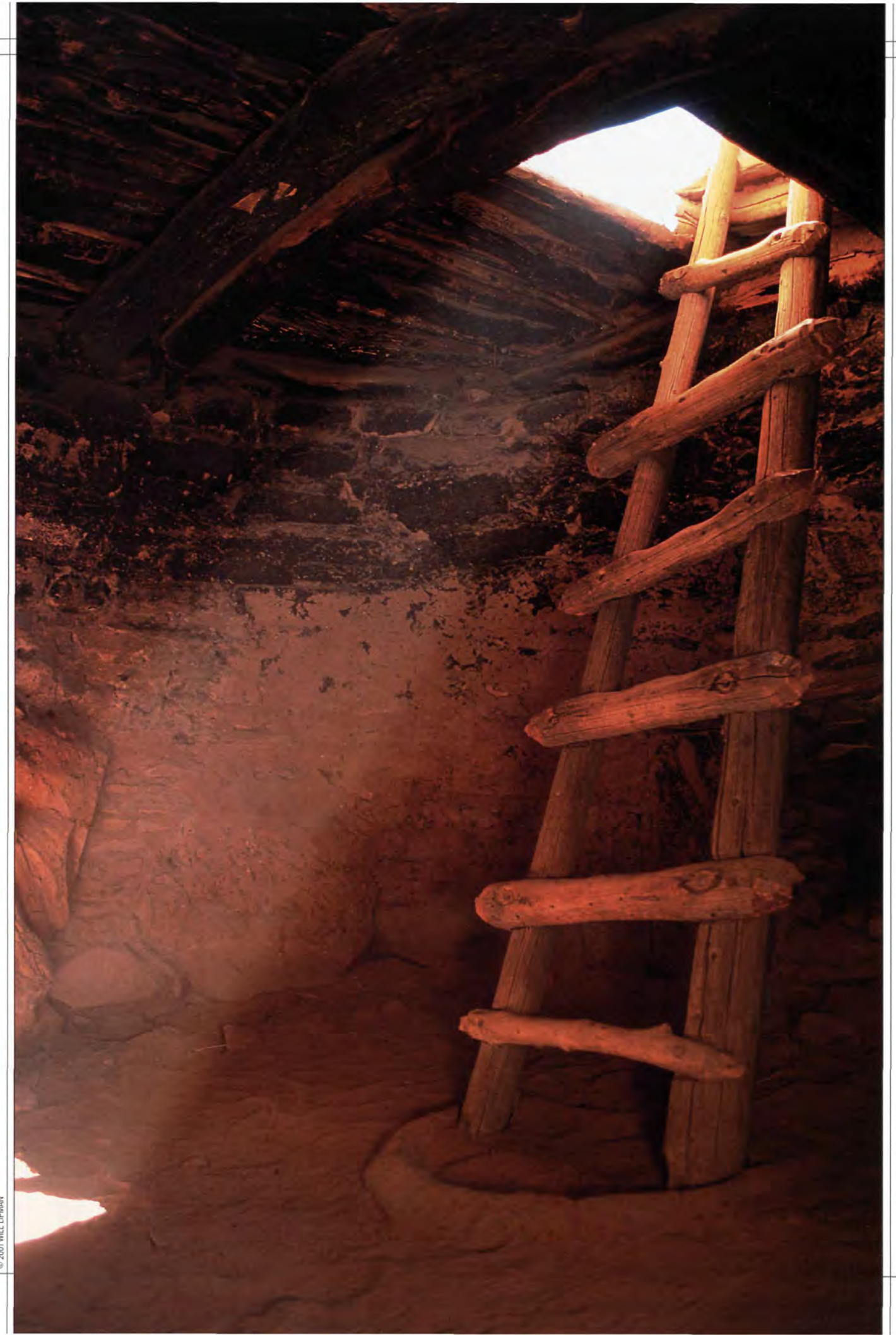
LIPE: The Park Service preserves and interprets our cultural treasures—archeological sites, standing structures, historic battlefields and landscapes, traditional properties important to Native Americans and other groups. Stewardship of course is essential. But research and interpretation are too. The three work together. If you have great resources you have great opportunities for interpreting them to the public, and research feeds the dynamic.

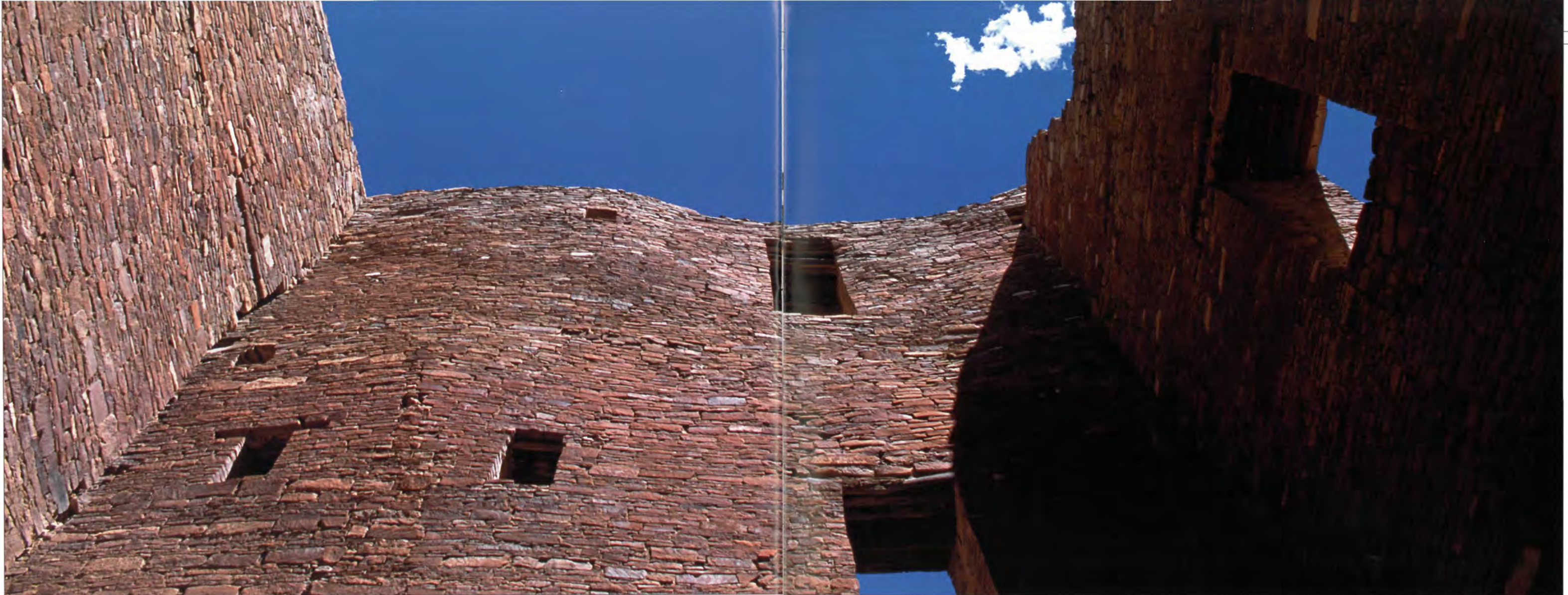
There's also an implied responsibility. Since the Park Service is charged with protecting these resources, it has a responsibility to lead. Archeological stewardship by itself doesn't accomplish anything. It just makes it possible sometime in the future to do research and interpretation. If they don't get done, stewardship is left without a real goal.

COMMON GROUND: What are the barriers?

LIPE: At least in some parks—and this is generally true in federal agencies—there's a tendency to think that research should be postponed until excavation techniques get better. In the past, I've made that argument myself. There's a good reason why this philosophy evolved. In the early days, methods were very crude. Many sites were completely dug up, precluding future research.

Although preservation remains a good policy, it can be carried to an extreme. What you're saying is that we're preserving sites





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today so better research can be done tomorrow. However, if the field continues to improve, we'll always be in that position. So you're always postponing into the future. This is an unwise stance. If you simply cut off research for the next century, you weaken the puzzle-solving process by hiding some of the pieces. Techniques, questions, and knowledge need to evolve together.

COMMON GROUND: How does this policy play out on the ground?

LIPE: Park managers are often overly cautious in approving projects that involve even minimal intrusion. So certain kinds of research seldom get done by inside-the-park archeologists. When it comes to outside researchers, the same policies apply, but there's also a demanding proposal-and-permitting process that can take months if not years. What does get done are projects designed to meet the demands of the National Historic

"Pledging to dig only on threatened sites has the unintended effect of trivializing archeology's contributions to society . . . what we're saying is that any other socially approved activity, like putting in an access road, ranks higher as a reason for excavating."

Above: Room at Chaco Canyon, Chaco Culture National Park.

Preservation Act—when a site is threatened by a new road or pipeline, something like that.

Pledging to dig only on threatened sites has the unintended effect of trivializing archeology's contributions to society. Essentially, what we're saying is that any other socially approved activity, like putting in an access road, ranks higher as a reason for excavating than the prospect of learning something.

My own research, done with colleagues from the Crow Canyon Center, focuses on AD 1150-1300 Puebloan communities in southwest Colorado and southeast Utah. These sites may have 50 to more than 500 structures, and many are on public property. Most

of the Pueblos lived here during that time. Learning about these sites is essential to understanding life at that time. Yet they're not threatened by public projects, because they're too big. If we had to wait for a pipeline to go through, we'd be in for a long wait.

Our methods go very light on the land. We're combining surface survey, remote sensing, and sampling-based excavation, which affects less than one percent of a site. I think this is a perfectly justifiable conservation model that can be used in the parks and elsewhere.

Let's face it—research, even when it involves excavation—is one of the smallest threats to the resource.

■■■
COMMON GROUND: Could you talk about the synergies you see among stewardship, research, and interpretation?

LIPE: Public understanding is not automatic. When the visitor encounters a site, the implied question is what does this mean. Interpretation requires an intellectual context. Research provides that. The context evolves as we learn more about the places and

objects that have miraculously survived from the past. Archeological research is not the only source of interpretive information, but it's an important one.

COMMON GROUND: So how does this foster stewardship?

LIPE: Fulfilling the public good, helping the public gain some perspective is the ultimate goal. Stewardship is essential so that

the real things from the past can be preserved and studied and displayed. Interpretation is the user-friendly interface between the visitor and the artifact. Research, by feeding interpretation, keeps the reason for stewardship alive.

COMMON GROUND: Can you cite some NPS projects that are maximizing the connections between stewardship and research?

LIPE: Many park archeologists have found ways to get research done alongside strong preservation policies. Larry Nordby's work at Mesa Verde, for instance—gaining insights into how cliff dwellings were built and used through detailed architectural studies and tree-ring dating. Larry's working with Jeff Dean at the Laboratory of Tree Ring Research at the University of Arizona on these studies, which do very little to disturb the larger setting.

COMMON GROUND: How is that work stimulating interpretation and stewardship?

LIPE: Nordby's project is producing new maps, new interpretations of sites that have been on display for generations—Cliff Palace, Balcony House, Spruce Tree House. In general, the parks do a good job of synthesizing regional research when they revise exhibits. My point is that this is increasingly based on research outside the parks, because that's where most of the work goes on. Archeologists are sometimes involved in making their field accessible to the public, but for the most part that job is done better by specialists—journalists, TV producers, museum exhibitors, teachers, park rangers. Nordby worked with writer David Roberts to publish a piece in *Smithsonian*. This really expands a park's ability to interpret its resources. A lot of work is going on to improve this interface. The Society for American Archaeology is developing a number of K-12 programs, and has a media relations committee that's working to bring researchers together with the press.

COMMON GROUND: How do you think the research potential can be realized?

"If you simply cut off research for the next century, you weaken the puzzle-solving process by hiding some of the pieces."

LIPE: There are lots of opportunities for the Park Service to leverage its personnel and dollars. They should, first, integrate research and management and, second, collaborate with other organizations, other agencies, non-profits, academic archeologists.

Many parks are surveying huge chunks of land, something rare in research outside the parks. These surveys are incredible opportunities to learn how people used the landscape, and to spot relationships among regions in the past. The recent work at Bandelier National Monument is a good example. Other projects haven't been so successful in getting beyond piling up site forms.

You know, park archeologists are more than capable. It's a matter of giving them the mission and the time. Give them a couple of months instead of a week to design the inventory. I've seen inventories that, with very little or no increase in cost, could have made much more substantial contributions to knowledge.

One major missed opportunity has to do with assessing the damage of the recent fires in the Southwest. This work tends to focus on known sites—documenting the damage and threats from erosion. But it often doesn't look at sites discovered due to the fires.

Left: Sherd from Moqui Canyon, Glen Canyon National Recreation Area.



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You see in the newspapers about how many new sites came to light. At Mesa Verde, there were hundreds. What you don't see is that little is being learned about them.

What's needed is a broader vision of how the dollars are spent. Maybe it would cost too much. Or maybe some out-of-the box thinking would give us more value.

COMMON GROUND: Can you expand on the idea of encouraging collaboration between park archeologists and academics?

LIPE: Mesa Verde recently issued a permit for its first research-oriented excavations in decades. Ken Wright, a prominent hydrologist who's explored past uses of water at Machu Picchu

and elsewhere, examined the prehistoric reservoir at Morefield Canyon, demonstrating there was a long history of sophisticated water management there. He brought expertise as well as funding, and his limited excavations produced a great deal of new knowledge. Working with both park and outside researchers, he also put together a workshop that explored whether Mummy Lake was a reservoir or a dance plaza. The answer seems to be that it was a reservoir, but probably not a very useful one. This kind of investigator-initiated research provides much of the

Below: Spruce Tree House, Mesa Verde National Park.



"The parks, as stewards of our cultural treasures, have an essential role in showing how our lives are linked with the lives of the past. Research raises questions and stimulates new methods. If the research stagnates, so does our understanding of ourselves."

dynamism in scientific fields. Park staff could leverage their own efforts by collaborating more.

I'll give you some other examples. A recent *American Antiquity* was devoted to an NPS project on Chaco Canyon from the 1970s and '80s. Park Service archeologists Tom Windes, Peter McKenna, and Joan Mathien all contributed, along with scholars from academia, museums, and the preservation field. I recently read a couple reports by academic archeologists taking the chemical fingerprints of construction beams at Chaco. They want to see where they were cut down and how far they were carried. This research can have a great impact on what the public knows about the park.

COMMON GROUND: What are some of the obstacles to such collaborations?

LIPE: It's a two-way street. One is receptivity on the part of the parks, putting a higher value on new knowledge. The other is for researchers to fit their interests into the parks' constraints. My experience with the Canon Park Scholars Program shows some of the problems. This is a great program—where else can an archeology grad student get \$25,000 a year to support dissertation research! Yet in many years the number of applications has been surprisingly low.

Maybe students and advisors see the topics as too management-oriented. With some exceptions, they are missing the possibilities. Last year's topic was the effects of fire on cultural resources. Fire has affected the archeological record for hundreds of thousands of years. You can't get much more basic than that.

Seems to me it's a lack of communication between the parks and the academic community. The physical and life sciences had lots more applications.

COMMON GROUND: Why was that, do you think?

LIPE: Those fields have a tradition of ties with academia. These relationships are more weakly developed in archeology.

COMMON GROUND: How can collaboration be encouraged?

LIPE: By putting the issue on the table, like we're doing now. Promote networking so outside researchers understand what projects will work in the park. Make publishing research a bigger part of the park archeologist's job. Get behind programs like the Canon Scholars.

COMMON GROUND: And what if the research flow continues to dry up?

LIPE: The parks, as stewards of our cultural treasures, have an essential role in showing how our lives are linked with the lives of the past. Research raises questions and stimulates new methods. If the research stagnates, so does our understanding of ourselves.

As this interview takes place, the NPS archeology and ethnography program is developing a distance learning course on archeology for park rangers and other interpreters, to foster the dynamic among research, stewardship, and interpretation. The course will be on the program's web site, www.cr.nps.gov/aad/. For more information, contact Barbara Little, NPS Archeology and Ethnography Program, 1849 C St., NW (NC210), Washington, DC 20240, (202) 343-1058, e-mail barbara_little@nps.gov.

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-pastpresent-



WILL COUNTS

"She did not change her expression for those two blocks, that was the thing," recalls photographer Will Counts of the image he captured as Elizabeth Eckford walked to previously all-white Central High School in Little Rock. It was 1957, and school desegregation had triggered a tumultuous national self-examination of race relations and equal rights. President Eisenhower called out the federal troops to keep the peace. Jeered by onlookers, Elizabeth walked on. "The thing I remember most," says Counts, "is how stoic she was. No matter what they said, she just kept walking." | In 1998, Congress authorized the National Park Service to study places pivotal to the desegregation of the schools. Properties such as Central High are part of an American narrative both painful and redeeming. Though the civil rights movement is commonly associated with the African American struggle for equality, other groups—Asians, Native Americans, and Latinos—will be represented in the study, conducted by the NPS National Historic Landmarks program. Three properties have already achieved landmark designation, with others listed on the National Register of Historic Places. The study's main goal is to nominate more sites for both honors. The effort reflects a growing trend to examine what historian Robin Winks calls "sites of shame." Says NPS chief historian Dwight T. Pitcaithley, "This study is at the front end of that change." The Park Service is embracing formerly sensitive and controversial aspects of U.S. history, dealing with what he calls the "unsettled issues" of the American story such as slavery and its legacy. The move promises a truer picture of a complex past, Pitcaithley says. | The picture above has its own hidden truth. Years later, Elizabeth Eckford asked why Counts didn't put down his camera and help her. "I didn't have an answer," he says. "I felt the best thing I could do was record the moment."

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Statements of fact and views are the responsibility of the authors and do not necessarily reflect an opinion or an endorsement by the editors or the National Park Service.

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“Sometimes our zeal to be good preservationists,
and follow the letter of the law, undercuts why
we’re protecting sites to begin with. We need
to consider both the means—preservation—
and the ends—understanding—and not
assume one will take care of the other.”

Bill Lipe, “Threat to Knowledge: Research and the Future of
Archeology in the National Parks,” page 26