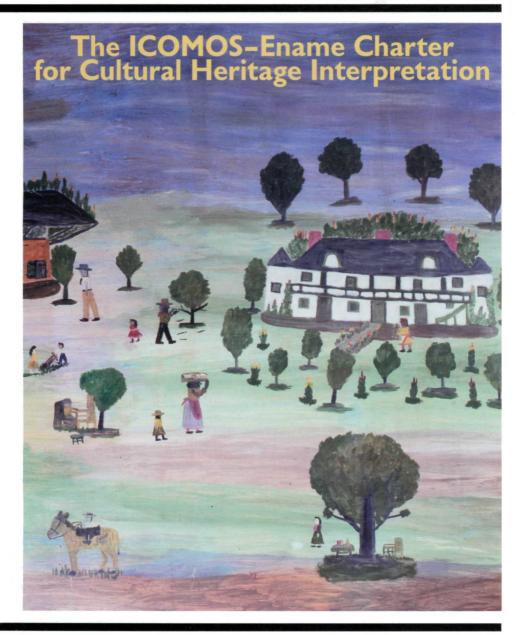
# FORGE WRIGHT

volume 23 number 1 • 2006





#### Origins

Founded in 1980, the George Wright Society is organized for the purposes of promoting the application of knowledge, fostering communication, improving resource management, and providing information to improve public understanding and appreciation of the basic purposes of natural and cultural parks and equivalent reserves. The Society is dedicated to the protection, preservation, and management of cultural and natural parks and reserves through research and education.

#### Mission

The George Wright Society advances the scientific and heritage values of parks and protected areas. The Society promotes professional research and resource stewardship across natural and cultural disciplines, provides avenues of communication, and encourages public policies that embrace these values.

#### Our Goal

The Society strives to be the premier organization connecting people, places, knowledge, and ideas to foster excellence in natural and cultural resource management, research, protection, and interpretation in parks and equivalent reserves.

#### **Board of Directors**

DWIGHT T. PITCAITHLEY, President • Las Cruces, New Mexico
ABIGAIL B. MILLER, Vice President • Shelburne, Vermont
JERRY EMORY, Treasurer • Mill Valley, California
GILLIAN BOWSER, Secretary • Bryan, Texas
REBECCA CONARD • Murfreesboro, Tennessee
ROLF DIAMANT • Woodstock, Vermont
SUZANNE LEWIS • Yellowstone National Park, Wyoming
DAVID J. PARSONS • Florence, Montana
STEPHANIE TOOTHMAN • Seattle, Washington
WILLIAM H. WALKER, JR. • Herndon, Virginia
STEPHEN WOODLEY • Chelsea, Quebec

#### **Executive Office**

DAVID HARMON, Executive Director
EMILY DEKKER-FIALA, Conference Coordinator
P. O. Box 65 • Hancock, Michigan 49930-0065 USA
1-906-487-9722 • fax 1-906-487-9405
info@georgewright.org • www.georgewright.org

The George Wright Society is a member of US/ICOMOS (International Council on Monuments and Sites—U.S. Committee) and IUCN–The World Conservation Union.

© 2006 The George Wright Society, Inc. All rights reserved. (No copyright is claimed for previously published material reprinted herein.)

ISSN 0732-4715

Editorial and manuscript submission guidelines may be found on our website at www.georgewright.org/forum.html. Text paper is made of 50% recycled fibers. Printed by Book Concern Printers, Hancock, Michigan.

# FORGE WRIGHT

volume 23 number 1 • 2006

Society News, Notes & Mail • 2

The Antiquities Act: The First Hundred Years of a Landmark Law David Harmon, Francis P. McManamon, and Dwight T. Pitcaithley • 5

#### The ICOMOS-Ename Charter: New Principles for Interpreting Cultural Heritage Sites

The ICOMOS-Ename Charter Initiative: Rethinking the Role of Heritage Interpretation in the 21st Century Neil Silberman • 28

Text of the ICOMOS-Ename Charter for the Interpretation of Cultural Heritage Sites • 34

Some Background Musings on the Need for an ICOMOS-Ename Charter for the Interpretation of Cultural Heritage Sites

Gustavo Araoz • 40

Economics and Authenticity:
A Collision of Interpretations in Cane River National Heritage Area, Louisiana
David W. Morgan, Kevin G. MacDonald, and Fiona 7. L. Handley • 44

Application of an Issue Evolution Model to Wildlife Issues in National Parks Kirsten M. Leong, Daniel J. Decker, Margaret A. Wild, and John Karish • 62

Adaptive Management of National Park Ecosystems

Tony Prato • 72

Partners in Parks: 1988-2006

Sarah G. Bishop . 87

**On the cover:** Africa House and Main House Mural, painted by Clementine Hunter on the wall of Africa House, Melrose Plantation, Louisiana. See article by Morgan et al. starting on p. 44. Photograph reproduced with permission of the Cane River National Heritage Area.

### SOCIETY NEWS, NOTES & MAIL

#### GWS comments on proposed new NPS management policies

As many GWS members are aware, last summer the Department of the Interior began a process to revise the National Park Service Management Policies, the current edition of which dates from 2001. The proposed revisions are extensive, and have been quite controversial. At its meeting in November the Society's Board of Directors decided that the GWS needed to weigh in with comments on the proposed revisions. In accordance with the GWS mission, our goal was to provide a nonpartisan, professional, park-resource-focused review of the proposed revisions. The executive office drafted the comments, which were then reviewed, edited, and approved by the Board. We submitted our comments to the National Park Service in early February.

Because of the importance of the Management Policies, and the gravity of the proposed revisions, we undertook an exhaustive critical analysis. The result is a comments document that runs to more than 40 pages. It begins with an explanation of the GWS position on resource protection and preservation in the U.S. national parks, and continues with specific comments, keyed to line and page number. The document ends with the following Conclusion and Recommendations:

In summary, there is no doubt that Congress' intent in establishing the National Park Service, individual park units, and the overall national park system has always been that resource preservation and protection is paramount and that any uses allowed in the parks must never under any circumstances jeopardize the enduring resource values that are the very basis for America's national park idea. We feel safe in asserting that a large majority of the American people have always endorsed, and continue to endorse, this vision of the national parks. Any revision of the NPS Management Policies, now and in the future, must be based on this foundational commitment to resource protection and preservation. Dozens of the proposed revisions to the 2001 Management Policies unnecessarily obscure, and not infrequently violate, this commitment. There are a number of good things in the 2006 revisions, but they are far outweighed by revisions that are detrimental to proper management of the parks. The 2006 proposed revisions consistently change wording so as to emphasize the permissibility of park uses rather than the protection and preservation of resources and resource values. The unmistakable impression is that the 2006 revisions are a systematic attempt to weaken the 2001 Policies.

We are also concerned that the process of revising the policies was based on a presumption, unsupported by consultation with Congress and the public, that changes to the 2001 Policies needed to be made. Rightly or wrongly, this calls into question the legitimacy of the revisions because of the perception that the public was left out of the process at the beginning.

We therefore recommend that the Department of the Interior and the National Park Service discard the current proposed revisions and begin the process afresh by holding a national public scoping process to determine, in the first place, whether revisions to the 2001 Management Policies are truly necessary after only five years. If such a scoping process determines that major changes in circumstances (e.g., post-9/11 national security concerns)

warrant a new edition, then collectively we will be starting the revision process from a much firmer and more transparent position. We will be better able to determine exactly what needs to be added to or altered in the 2001 policies to address these changed circumstances and whether, in addition to that, the language of core sections of the policies needs to be sharpened to bring the protection and preservation mission of NPS into perfectly clear focus. As noted throughout this document, the GWS supports revisions to the NPS Management Policies that consistently and unequivocally endorse this fundamental mission.

We urge all GWS members with an interest in the National Park Service to look at this important document. You can view or download the GWS comments at:

#### http://www.georgewright.org/nps\_mp\_comments.pdf

The GWS comments are keyed to the line and page numbers of the following document, which is a comparison of the 2001 Management Policies and the proposed 2006 revisions, showing all the proposed changes: http://www.nps.gov/policy/mp/comparison.pdf. While the public comment period is now over, in response to the comments received (reportedly in the tens of thousands) the Park Service has announced it will undertake another round of revisions to the policies. It remains to be seen whether this will satisfy the many critics of the process—including some in Congress, from both sides of the aisle—who have called for the rewrite to be abandoned.

#### 2006 GWS Board election: Two seats open

Nominations are now being accepted for the 2006 election for the Society's Board of Directors. Board members David Parsons and Dwight Pitcaithley are both reaching the end of their second and final term, and so their two seats will be up for election. We are now accepting nominations from GWS members who would like to be candidates. The term of office runs from January 1, 2007, through December 31, 2009. Nominations are open through July 1, 2006. To be eligible, both the nominator and the potential candidate must be GWS members in good standing (it's permissible to nominate one's self). The potential candidates must be willing to travel to in-person Board meetings, which usually occur once a year; take part in Board conference calls, which occur several times per year; help prepare for and carry out the biennial conferences; and serve on Board committees and do other work associated with the Society. Travel costs and per diem for Board meetings are paid for by the Society; otherwise there is no remuneration. Federal government employees who wish to serve on the Board must be prepared to comply with all applicable ethics requirements and laws; this may include, for example, obtaining permission from one's supervisor, receiving ethics-related training, and/or obtaining a conflict of interest waiver. The Society can provide prospective candidates with a summary of the requirements.

The nomination procedure is as follows: members nominate candidates for possible inclusion on the ballot by sending the candidate's name to the Board's nominating committee. The committee then, in its discretion, determines the composition of the ballot from the field of potential candidates. Among the criteria the nominating committee considers when determining which potential candidates to include on the ballot are his/her skills and experience (and how those might complement the skills and experience of current Board mem-

bers), the goal of adding and/or maintaining diverse viewpoints on the Board, and the goal of maintaining a balance between natural- and cultural-resource perspectives on the Board. (It also is possible for members to place candidates directly on the ballot through petition; for details, contact the GWS office.) To propose someone for possible candidacy, send his or her name and complete contact details to: Nominating Committee, The George Wright Society, P.O. Box 65, Hancock, MI 49930-0065 USA, or via email to info@george-wright.org. All potential candidates will be contacted by the nominating committee to get background information before the final ballot is determined. Again, the deadline for nominations is July 1, 2006.

#### New books

- Three Rivers: The Yukon's Great Boreal Wilderness. This coffee-table book, edited by Juri Peepre and Sarah Locke, is an anthology of photography, art, essays, stories, and poetry celebrating the Three Rivers wilderness and calling for protection of all three watersheds (the Wind, Snake, and Bonnet Plume). Contributions from such notables as Margaret Atwood and John Ralston Saul are supplemented by work from participants in a canoe journey through the wilderness that formed part of the conservation campaign to save the area. A co-publication of the Canadian Parks and Wilderness Society and Harbour Publishing. Ordering information from www.cpawsyukon.org.
- The Antiquities Act: A Century of American Archaeology, Historic Preservation, and Nature Conservation. This volume marking the 2006 centennial of the law was co-edited by GWSers Dave Harmon, Frank McManamon, and Dwight Pitcaithley. Seventeen chapters cover the often-controversial history and achievements of this versatile and important law, which forms the foundation for American cultural-resource law, as well as being the basis for the creation of dozens of important natural-area national monuments. Ordering information from the University of Arizona Press at www.uapress.arizona.edu. (For more, see the article adapted from the book starting on the next page.)

## The Antiquities Act: The First Hundred Years of a Landmark Law

David Harmon, Francis P. McManamon, and Dwight T. Pitcaithley

Adapted from *The Antiquities Act: A Century of American Archaeology, Historic Preservation, and Nature Conservation*, David Harmon, Francis P. McManamon, and Dwight T. Pitcaithley, editors. © 2006 The Arizona Board of Regents. Reprinted by permission of the University of Arizona Press.

THE HISTORY OF AMERICAN ARCHAEOLOGY, CONSERVATION, AND HISTORIC PRESERVATION often is told in terms of legal milestones, and rightly so. An environmental activist working to expand a nearby park, a historic preservationist trying to save a cherished old building, a volunteer working on a national wilderness campaign, an archaeologist investigating an ancient village site in advance of reservoir construction—all are working from a solid foundation of statutory authorities that, law by law, have expanded protections for archaeological resources, historic structures, and natural areas. There are many laws that mark critical junctures in our national conservation policy, yet what is arguably one of the most important of them all remains little known outside of specialist circles. That law is the Antiquities Act of 1906.

No other law has had such a wide-ranging influence on the preservation of our nation's cultural and natural heritage. Why is the Antiquities Act so important?

#### Creation of national monuments.

The Act gives the president the power to establish specially protected national monuments from tracts of existing federal public land. These monuments range from prehistoric ruins and other objects of antiquity (hence the Act's name) all the way up to entire landscapes of ecological and scientific importance, covering thousands or even millions of acres. With President Bush's proclamation of African Burial Ground National Monument in February 2006, the Act has now been used by 15 presidents to proclaim new national monuments or expand existing ones.1 These monuments, which cover over 79,700,000 acres, include world-class protected natural areas, many of

which have gone on to receive national park status, and cultural sites of international renown. Of America's twenty World Heritage sites, seven originated as national monuments under the Antiquities Act: Carlsbad Caverns National Park, Chaco Culture National Historical Park, Grand Canyon National Park, Olympic National Park, Statue of Liberty National Monument, Glacier Bay National Park and Preserve, and Wrangell-St. Elias National Park and Preserve.2 Of the national park system's 390 units, almost one-fourth (88; 22.5%) had their origins as national monuments proclaimed under the Antiquities Act, and the law was used to greatly extend several other park units. In addition, there are now 18 national monuments managed solely by agencies other than the National Park Service, such as the Bureau of Land Management, U.S. Forest Service, and U.S. Fish and Wildlife Service.

Establishing the primacy of commemorative, educational, and scientific values for archaeological resources. Section 3 of the Act establishes the regulation of archaeological investigations on public lands and states that such investigations are "for increasing the knowledge of [archaeo-



Vermillion Cliffs National Monument, Arizona. Photo courtesy of the Bureau of Land Management.

logical sites and] ... objects, and ... for permanent preservation in public museums." In one long sentence, the second half of this section makes clear that archaeological sites and the items removed from them are most important for what we can learn from them with proper study. The objective of archaeological investigations is to study the past through historical and scientific methods, not to retrieve objects for display, exhibit, or sale.<sup>3</sup>

A foundation for heritage professionalism. The Act provides a legal and public policy foundation for public archaeology in the United States, and for public agencies being involved in the preservation of historic places and structures. Its provisions

have done much to foster the development of the professions of archaeology, history, and historic preservation in the public sector in this country, and has had an important influence on anthropology and paleontology as well.<sup>4</sup>

A scientific basis for nature preservation. The Act was the first law to systematically enable the creation of large-scale nature reserves for scientific (rather than scenic or economic) reasons.<sup>5</sup> Not only did it therefore prefigure today's emphasis on landscape-scale ecosystem conservation by nearly a century, it remains a vital tool for such efforts. In fact, over the past 30 years practically the only big nature reserves created by the federal government have come as the result of monument declarations under the Antiquities Act.

An important presidential prerogative. The Act established the power of the president to proactively preserve important cultural sites and natural areas (up to and including large landscapes of ecological value) that are threatened with degradation or outright destruction. This "one-way" power—the president can unilaterally establish national monuments, but only an act of Congress can abolish them—is an important legal doctrine that established, and has enhanced, the leadership of the executive branch in archaeology, historic preservation, and nature conservation.

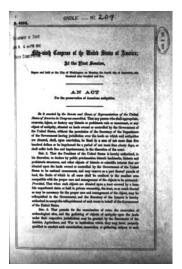
Simply put: In shaping public policy to protect a broad array of cultural and natural resources, the impact of the Antiquities Act is unsurpassed, extending far beyond what is suggested by its quaint title. In truth, the name of the Act is downright misleading—or at least seriously deficient, because the national monument-making provision of the law has been used to protect vast natural areas in addition to the kind of well-defined

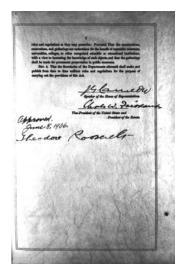
archaeological sites that the word "antiquities" connotes. This is the controversy that has swirled around the Act throughout its history: whether the scope of discretionary monument proclamations as exercised by various presidents has far exceeded what was intended by Congress.

The heart of the controversy is an innocuous clause at the beginning of Section 2 of the Act (see text box). Here, the president is authorized to "declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with proper care and management of the objects to be protected...." The key phrases, with emphasis added, are "objects of historic and scientific interest" and "confined to the smallest area compatible with proper care and management." One reasonable interpretation of these phrases would be that the Act applies only to very specific natural features—a rock formation, say-and that the boundaries of the monument being created should extend very little beyond the feature itself. Another interpretation, which critics of the Act have found highly unreasonable, is that an object of scientific interest can be something as vast as the Grand Canyon, and the smallest area compatible with protection and management can be millions of acres in extent. Yet it is this second, expansionist interpretation that has been adopted by a number of presidents, Republican and Democrat alike, over the past century.

The precedent began with the man who signed "An Act for the Preservation of American Antiquities" into law on June 8, 1906: the larger-than-life *Theodore Rex*, as one of his recent biographers has called him. Congress was well aware of the character of the president into whose hands it was delivering the law, of his sovereign vision of power and his willingness to wield it. And,

The original of the Antiquities Act, as signed by Theodore Roosevelt on June 8, 1906, and filed the next day. Images courtesy of the NPS Historic Photo Archive.





Volume 23 • Number 1 (2006)

#### An Act for the Preservation of American Antiquities

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any person who shall appropriate, excavate, injure, or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall, upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court.

Sec. 2. That the President of the United States is hereby authorized, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with proper care and management of the objects to be protected: Provided, That when such objects are situated upon a tract covered by a bona fide unperfected claim or held in private ownership, the tract, or so much thereof as may be necessary for the proper care and management of the object, may be relinquished to the Government, and the Secretary of the Interior is hereby authorized to accept the relinquishment of such tracts in behalf of the Government of the United States.

Sec. 3. That permits for the examination of ruins, the excavation of archaeological sites, and the gathering of objects of antiquity upon the lands under their respective jurisdictions may be granted by the Secretaries of the Interior, Agriculture, and War to institutions which they may deem properly qualified to conduct such examination, excavation, or gathering, subject to such rules and regulation as they may prescribe: *Provided*, That the examinations, excavations, and gatherings are undertaken for the benefit of reputable museums, universities, colleges, or other recognized scientific or educational institutions, with a view to increasing the knowledge of such objects, and that the gatherings shall be made for permanent preservation in public museums.

Sec. 4. That the Secretaries of the Departments aforesaid shall make and publish from time to time uniform rules and regulations for the purpose of carrying out the provisions of this Act.

Approved, June 8, 1906

characteristically, Theodore Roosevelt wasted very little time before making use of the Act. On September 24, 1906, he proclaimed the first national monument: the imposing monolith of Devils Tower in Wyoming. Before he left office in 1909, Roosevelt declared seventeen more, and therein lies the beginning of our story. Many

of them, like Devils Tower, encompassed relatively small areas. But several, such as Grand Canyon and Mount Olympus, were Rooseveltian in scope. TR's dynamic use of the Act set off reverberations that are still being felt today. It was as if he emboldened his successors to dare to match the spirit, if not the sheer volume, of his example.

This year marks the hundredth anniversary of the Act. The centennial affords an unparalleled opportunity for present-day stewards to reflect on its historic achievements, revisit its controversies, critique its shortcomings, remind fellow professionals and the general public of its continuing importance, and look ahead to its future in the 21st century. We have tried to do that in our forthcoming book, titled The Antiquities Act: A Century of American Archaeology, Historic Preservation, and Nature Conservation. The rest of this paper, which is an adaptation of our summary chapter, outlines what we and our contributing authors have found out about this remarkable piece of legislation.

IN MANY WAYS, THE CENTRAL STORY OF THE Antiquities Act revolves around intentions. What did the architects of the Act intend? A series of tiny sites protecting well-defined archeological and natural curiosities, covering the smallest possible area? Or did they truly mean to give the president more leeway? If they did mean to do that, have subsequent presidents stretched the original intent beyond all reasonable recognition? And how does one explain the fact that presidents as different as the imperial Theodore Roosevelt and the reticent Calvin Coolidge have nevertheless used the Act to remarkably similar ends? In the years since its passage, the federal courts have found in the language of the Act sufficient justification for the broader, Rooseveltian interpretation. Moreover, the range of opinions expressed by proponents of one or another version of the legislation put forward between 1900 and 1906 included broad as well as narrow perspectives. These questions are what make the history of the Antiquities Act so fascinating.

To answer those questions, one must first understand where the law came from and why it took the form that it did. The Antiquities Act is very much a product of its time, the direct result of two streams of angst whose headwaters are to be found in the specific conditions that prevailed at that particular moment in history. As the nineteenth century wound down, civic-minded elites woke up to the disturbing fact that America was finite. The image of the endlessly expanding, always beckoning frontier, so important to the doctrine of Euroamerican expansionism, had been abruptly erased by the historian Frederick Jackson Turner in his famous 1893 paper "The Significance of the Frontier in American History." Turner's decisive pronouncement that the American frontier was now closed underscored what had become apparent to many during the previous decade—that the great open landscapes of the West were filling up with settlers or increasingly coming under the control of land speculators. The critical mythic spaces occupying the very heart of the national unification story were rapidly being piecemealed into a motley assortment of private uses.

Congress already had preserved several outstanding examples of the American landscape and cultural heritage by creating national parks or reservations at Yellowstone, Mackinac Island (later transferred to the control of the state of Michigan), Casa Grande Ruin (between Tucson and Phoenix in Arizona), Sequoia, General Grant, and Yosemite (the last three all in California's Sierra Nevada. In this context, handing the president broad power to reserve parts of those landscapes for continuing public benefit and edification was an act of nation-building.

At the same time, mounting reports of

settlers, curiosity-seekers, newfangled tourists, and profiteers ransacking southwestern archaeological sites for building materials, curios, or treasures did not comport well with the received notion of an America based on justice and probity. As Ronald F. Lee noted in his pioneering history of the Act (originally published in 1970 and presented in abridged form in our book),7 the elite opinion leaders were no doubt dismayed that the destruction was truly a democratic activity, carried on by everyone from illiterate cowboys to some of their rival eastern establishment institutions and Ivy League colleagues bending to demands for artifacts to display and exhibit in universities and museums. It made sense for these influential people to support a law whereby the president could, with a stroke of his pen, put a halt to the unseemly business in certain select places.

Yet all was not straightforward and simple in finding support for the Antiquities Act. Rising local and regional elites in the Southwest and West sometimes resented eastern scholars poaching on their archaeological sites. Even within the national government, the General Land Office of the Department of the Interior and the Smithsonian Institution jousted over which should be responsible for archaeological sites on public lands.8 The overall objective of protecting archaeological sites from looting, and preserving them until they could be investigated using the newly emerging scientific methods and techniques of archaeology, was agreed to by the Act's proponents. By contrast, who would oversee the protection, and perhaps more to the point, who would regulate the subsequent investigations, was vigorously disputed. These concerns and disputes, of course, fit into the broad context of American nationalism, the

rise of the Progressive political movement, the emergence of government programs to force the assimilation of American Indians into mainstream society, and parallel efforts to record Native American traditions before they disappeared.<sup>9</sup>

For some, preserving archaeological ruins<sup>10</sup> was a subtle but tangible reminder of who the conquerors were, of whose civilization had "won" the West. Newly anointed, these national monuments spoke to the supposed demise of Native American civilization while at the same time proclaiming the permanence and benevolence of the power emanating from Washington.

Many factors contributed to the impetus behind the Antiquities Act. The storied elements of the American nation were both natural, in the form of supposedly untouched wilderness landscapes,11 and cultural, in the vestiges of the country's ancient past. Char Miller makes the insightful observation that creating national monuments is a type of civic consecration: "Through a secular legislative act, the nation-state, at Devils Tower and elsewhere, created a new kind of sacred space-national in name, sweep, and scope...."12 It is by these means that the Antiquities Act, in subtle but deeply permeating ways, shored up key parts of the dominant unifying narrative the federal government wished to tell.

Understanding this helps to explain the motivations of the two men most responsible for maneuvering the law into its final form: Edgar Lee Hewett and John Fletcher Lacey. Today, their names are all but forgotten except by archaeologists and historians of conservation, but their relative obscurity is undeserved. Hewett was an administrator, author, and educator as well as a field archaeologist, whose mix of experience and talent enabled him to forge the compromise that became the final text of the Act. Hewett was one of those invaluable behind-the-scenes brokers without whom most laws would never get through the proverbial sausage factory. As told by Raymond Harris Thompson, the story of how Hewett managed to get squabbling factions to come together behind the language of the Act is one of perseverance mixed with political and professional acumen and flexibility.<sup>13</sup>

At the beginning of the twentieth century, Hewett was a man determined to make a mark, both scholarly and politically, on the fledgling profession of American archaeology. He also was a booster of the American Southwest and West who sought to counter the cultural and educational dominance of the eastern elite with a regional perspective. But what Thompson also brings out in his profile is a less obvious point: Hewett's was a politics of place, grounded in his love for the Pajarito Plateau and northern New Mexico, a landscape that combined both of the mythic elements described above. As Thompson pinpoints, Hewett was operating on the principle that "the federal government has a statutory responsibility for the archaeological resources on the land it owns or controls."14 This notion of steward-

Aztec Ruins National Monument, New Mexico. Photo courtesy of the National Park Service.



ship became the foundation for the profession, the bedrock to which all archaeology on public lands is anchored.

Although Hewett was personally interested primarily in archaeology, because he had imbibed the New Mexican landscape he readily saw the political—and symbolic-advantages of including the protection of "objects of scientific interest" alongside that of archaeological sites. The language of the Antiquities Act is a hybrid of natural and cultural concerns not because of ineptitude, but because of Hewett's perception that the competing interests among government agencies and the scientific community could be reconciled, along with his political skills in executing a compromise. As Thompson describes, Hewett grasped the basic problem: the rivalry between the Department of the Interior, which wanted a means to create national parks and control the protection of archaeological sites on public lands, and the Smithsonian Institution, which wanted to control the investigation of archaeological sites. It was he who recognized that their "dueling bills" strategy was going nowhere. Most important of all, it was he who understood that the two approaches could best be reconciled in one piece of legislation, and that the way to get it passed was by coming up with carefully phrased, low-key wording palatable to a Congress that was no doubt weary of the topic and wished to dispose of it as noncontroversially as possible.

Any antiquities bill, no matter how carefully written, faced a major hurdle in the House of Representatives in the form of the Committee on Public Lands, through whom all such legislation had to pass. Because the committee was dominated by members from the West who were largely wary of federal power, success for the

Antiquities Act depended on the political skill of the committee's chairman, John F. Lacey. Rebecca Conard introduces us to this Iowa congressman. Lacey was a major figure in conservation at the turn of the 20th century, but his personal background, as she tells us, provides few clues as to what fueled his interest in nature protection.15 Unlike Hewett, Lacey was incapable of falling in love with a landscape. His approach to life was cerebral: when confronted with something new, rather than assimilating it emotionally he focused all his concentration on it, framing it as a problem or an issue, studying it until he satisfied himself that he owned it. His mind was essentially acquisitive. And intense: Lacey was a man who, as a soldier, prided himself on being able to read a dry-as-dust legal treatise while siege guns roared around him. The picture Conard paints is of a man who placed a premium on self-mastery. She was challenged to be able to paint anything at all, given the reticence of Lacey's personal papers. This reluctance to speak from the heart, even in private letters, only serves to reinforce the image of Lacey as iron-willed and rather ascetic. Then too, he was politically ambitious in ways that Hewett was not.

Lacey's Civil War experience forged in him a deep sense of duty to country, and it is here that we find the roots of his interest in conservation. Whether it was his support of the Yellowstone Protection Act and of President Cleveland's use of the game reserve act, his own work on the migratory wildlife law that carries his name, or his ushering of the Antiquities Act through Congress, Lacey was driven by a belief that good government—meaning impartial, factually informed government—was needed to keep the appalling extremes of human



Glacier Bay National Park & Preserve originated as a national monument. Photo courtesy of the National Park Service.

behavior in check. The government, in essence, had to step in and impose order on people who, unlike himself, were unable to master their own worst tendencies.

Once the antiquities bill was passed, it had to be enacted, and the mantle of leadership passed from Hewett and Lacey to Theodore Roosevelt. Like Lacey, TR placed a high value on self-control and determination. Indeed, some of his most famous exploits were, in their way, exercises in will: one thinks of him sojourning in the North Dakota badlands in the 1880s, leading the charge up San Juan Hill in 1898, finishing a speech after an assassination attempt in 1912. Furthermore, as Char Miller highlights, Roosevelt was a Progressive who "believed deeply in the capacity of government to mold the commonweal, present and future."16 He shared this Progressive philosophy with both Lacey and Hewett, and it is the common thread that binds their disparate personalities together. Roosevelt, of course, was a much larger performer performing on a much larger stage, but the Progressive kinship among the three central figures of the Act's passage—which was endorsed and shared by a majority of Congress and by key

administrators at the Department of the Interior, such as W. A. Richards, commissioner of the General Land Officeinformed the very nature of the law. Simply put, at the time of the Act's passage in June 1906 the key people in Washington believed in the Progressive vision of a technocratically competent, beneficent government whose expertise would be placed at the service of (what were assumed to be) common ideals. Under those assumptions, it makes perfect sense to give the president broad power to proclaim national monuments. After all, he will be acting on expert recommendations that, precisely because they are expert, must by definition produce the best possible result. That logic carried the day. Outside of politicians and communities in the West whose commercial interests were the most likely to be affected by monument proclamations, few had philosophical qualms about it.

This review leads us to the conclusion that the language of the Antiquities Act was carefully chosen by ideologically informed men who were deeply concerned that an old order was passing away and wanted to do something about it. Hewett, Lacey, and others who contributed to the drafts of bills that became the final text of the Act had a clear vision about what kind of power should be vested in the president, and they thought that bestowing such power was a good thing. They shared an understanding of the cultural, educational, and historic values of archaeological, natural, and scientific resources and an agreement that these should be publicly protected and their use regulated. Western congressional interests were in dissent, and that dissent is reflected in the Act's language referring to the "smallest area compatible with proper care and management of the objects to be protected." But the majority of Congress acceded to the Progressive vision. Had Congress wanted to, it could have endorsed earlier antiquities bills that specifically limited monuments to a few hundred acres; it did not. Even though Lacey himself promised western representatives that the Act would not be used to "lock up" large areas, the House and Senate knew exactly what sort of a man they were about to hand over these powers to. Unless they were incredibly naïve they also must have known what use he would likely make of them. Roosevelt's bully-pulpit track record was there for all to see, as was his keen interest in conservation. It cannot have come as a shock to any member of Congress when, in December 1906, TR declared the first large natural national monument, Petrified Forest, nor even when he outdid that by more than tenfold with an 800,000-acre Grand Canyon proclamation some thirteen months later. Progressivism was a supremely self-confident ideology, daring to do great things, one that meshed perfectly with TR's natural bent. It goes a long way toward explaining why he had no compunction in stretching the language of the Act to its very limits—and perhaps beyond.

In summary, the main cultural components of the Antiquities Act were a broadbased anxiety over the loss of key mythic elements of the putative national narrative, fused with a Progressive conviction in the ability of government to identify and maintain a commonweal. The result was a law uneasily embedded in a mixture of paradox and irony. Paradox, because the Antiquities Act was seen by its framers as an instrument to promote a unified citizenry, a cohesive nation-state, even though its methods were sure to alienate people (mostly in the West) whose economic aspirations were curtailed

by new monument proclamations. Irony, because while both the eastern supporters of the Act and the western opponents of it were conscious of the passing away of a desirable old order, they seemed to be unaware that their visions of this order were not only very different, but in large part mutually exclusive.

The West's alienation from the Act disposed itself in legal flare-ups over the Mount Olympus and Grand Canyon proclamations, but the issue really came to a head in the 1940s when the showdown between Franklin D. Roosevelt (acting through the Park Service) and Wyoming politicians over the creation of Jackson Hole National Monument nearly blew apart the Antiquities Act. Progressivism had passed from the scene, driven from the field by the disillusionments of World War I and the Great Depression, but paternalism of a different sort was still very much in evidence. Looming metaphorically above the Tetons was the figure of an actual flesh-andblood paterfamilias, an ultra-rich easterner-and hence an outsider both socioeconomically and geographically-who was hoarding most of the land down in the valley because he was certain its highest and best use was as part of the national park system. There can be little doubt that resentment of John D. Rockefeller, Jr., played an important role in Wyoming's decision to challenge FDR's Jackson Hole monument proclamation: the lawsuit may have been filed against the Park Service, but in the minds of many locals the great magnate was an unindicted co-conspirator. The social and economic disparities of the two sides are a virtual subtext to Hal Rothman's account of the controversy. In his summingup, Rothman gets right to the heart of the

matter: this was an early battle between the Old West of resource extraction and the New West of services and tourism.<sup>17</sup>

In seeking the Rockefeller lands for the new monument, the Park Service was looking to garner a complete range of life zones from the high peaks of the Grand Tetons down to and across the valley floor—a valley which included much valuable ranchland. That was the crux of the issue. Although Wyoming argued that its sovereignty had been traduced and the Park Service had not properly identified scientific or historic objects that would justify the monument, the real reason for the outcry was that tax revenues, grazing fees, and potentially developable land would be lost. However, these objections would not (and



Jackson Hole as it appeared in 1933, with the valley lands that would be at the heart of the 1940s controversy in the foreground. George Alexander Grant photograph, courtesy of National Park Service Historic Photo Collection.

probably could not) be adjudicated. The Park Service mounted a typical legal defense, first trying to get the suit summarily dismissed on procedural grounds and then, after that failed, enlisting expert witnesses to testify at trial to the monument's ecological and historic importance. The trial judge, as so often happens, ended up dismissing the lawsuit for technical reasons and did not even rule on the merits of the

proclamation. In terms of clarifying the limits of presidential authority under the Act, the lawsuit accomplished nothing, though some years later it did induce the government to negotiate away the president's authority to use the Act in Wyoming as a way to get the delegation's support for incorporating most of Jackson Hole National Monument into Grand Teton National Park.

Had the presidential powers under the Act been emasculated at that time, as many locals in and around Jackson Hole fervently wished, the most serious repercussions would have been felt two generations later in, of all places, Alaska. That is because in 1978 President Jimmy Carter used the Antiquities Act to preserve tens of millions of acres of the state as national monuments, forestalling the transfer of what was then unassigned national-interest public domain (the so-called (d)(2) lands) to non-conservation status. The story is told by one of the protagonists, Carter's secretary of the interior, Cecil D. Andrus, along with his colleague at the Andrus Center for Public Policy, John C. Freemuth. They give us an insider's view of what has been called the greatest single act of land preservation in American history.18

The unique circumstances surrounding the disposition of Alaska's public domain, which had been slowly building since statehood in 1958, reached a crisis stage by the late 1970s, and the problem of what to do landed on the desk of Andrus. He was absolutely convinced then that using the Antiquities Act to secure protection of the so-called (d)(2) lands was right and necessary, and he and Freemuth remain convinced now. While Andrus and the rest of the Carter administration faced a definite precipice in the form of a pending expira-

tion of the (d)(2) moratorium, their response was anything but precipitate. Carter's proclamations of December 1, 1978— arguably the most decisive and far-reaching single act of conservation in American history—were preceded by years of research and analysis, as well as extensive negotiations through various congressional channels. Alternatives to the use of the Antiquities Act, such as withdrawals under the Federal Land Policy and Management Act (FLPMA), were considered. Finally, when it looked as though the whole process was about to go over the cliff, Andrus advised Carter to act.

Yet both men knew that the proclamations were not the end of the story. They recognized that Antiquities Act designations were too inflexible to allow for the "subtle shades of management regimes" that would be desirable in Alaska. Although the Carter proclamations were vilified by critics as cramming a one-size-fits-all federalism down the throats of Alaskans, in truth they were a conscious tactic to get deadlocked negotiations into an end game by removing any further incentives to stall. They produced exactly this effect, and in two years almost all the newly created

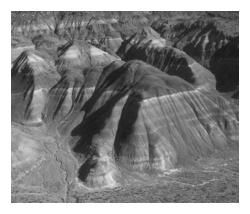
Lake Clark National Park originated as a national monument.
Photo courtesy of the National Park Service.



national monuments were redeployed into other designations. Many went into a new status of "national park and preserve" in which the national park portion is open to traditional subsistence activities, while the national preserve portion is open to sport hunting and trapping, under federal regulation.19 It is also worth noting, in case one is inclined to frame this issue in a partisan way, that the Democrat Andrus was working within a framework of withdrawals established by his Republican predecessor in the Nixon administration, Rogers C. B. Morton. Furthermore, one of the main opponents of the Carter proclamations was Alaska Senator Mike Gravel, a Democrat.

Accusations of partisan politics resurfaced again—with a vengeance —in 1996. There is no question that proclaiming Grand Staircase–Escalante National Monument was a calculated election-year move by President Bill Clinton, one sure to win him favor nationally while costing him nothing in the electoral college, since Utah was irretrievably Republican. But, as Mark Squillace goes on to explain in his chapter, Clinton's second-term proclamations were not only politically astute, but strategic in a different way: they were based on carefully

Grand Staircase–Escalante National Monument. Photo courtesy of the Bureau of Land Management.



crafted and ecologically significant recommendations by Secretary of the Interior Bruce Babbitt. Not only did Babbitt offer to visit potential new monuments and meet with the local congressional delegation before making a recommendation to the president-discussions that often sparked changes in the monument proposal—he also encouraged delegations to preempt the process by developing their own alternative plans for protecting areas that were under consideration as potential monuments. "This last concession resulted in legislation protecting several remarkable areas that would not likely have received congressional attention without indications from the secretary that these areas were being considered for national monument status," notes Squillace.20 By allowing local interests the leeway to develop their own protection strategies for these lands, presumably the results would be more in tune with their needs and desires than a monument designation.

Babbitt was painted as an uncompromising ideologue by his opponents, but Squillace details just how much he was concerned with accommodating local objections and certain commercial requests (such as for utility rights of way across Sonoran Desert National Monument). Nor was Babbitt interested in exposing the Antiquities Act to possible amendment or repeal by recklessly using it-which may be why he did not push Clinton to proclaim the Arctic National Wildlife Refuge as a national monument. In light of continued attempts to open portions of the refuge to oil drilling, environmentalists may well point to Babbitt's decision (and that of Andrus before him) as a matter of deep regret, although the additional protections monument status would have added may not be enough to

prevent Congress from authorizing drilling anyway.

However much Babbitt and Clinton were willing to voluntarily engage with local opponents of monuments, they were not ready to support proposals to amend the Act to require public consultations before proclamations are made. This brings up a fundamental issue of fairness, the analysis of which is the crux of James R. Rasband's essay.21 It is not enough, he argues, for the monuments to have achieved—as virtually all of them have-widespread ex post facto acceptance, even among former local opponents. No matter how overwhelmingly positive the Act's accomplishments, Rasband says, the process by which they were achieved is deeply, perhaps fatally, flawed because it is undemocratic and therefore runs counter to the entire basis of American government, which is founded on the free consent of an informed citizenry. This is a serious criticism, and cannot be ignored.

Rasband is not denying that the Act has been beneficial; for him, "the critical question is whether the same or similar results could be achieved by a process that does not so thoroughly disregard the input and interests of rural communities and state and local governments." He thinks it could, and wants to see an amendment to the Act requiring local consultation and impact studies prior to proclamation. He goes on to rebut a number of arguments that are often made against amending the Act, pointing out that the Federal Land Policy and Management Act can now be used to achieve many of the same goals. For Rasband, FLPMA has rendered the Antiquities Act largely (though not completely) superfluous. He closes his argument by asking whether the paternalistic decision-making structure of the Act-what he calls "conquest by certitude," borrowing a phrase from Charles Wilkinson—is really appropriate today, particularly given the fact that public participation and impact studies are so firmly enshrined in the rest of natural resources law.

On purely ethical grounds it really is difficult to disagree with Rasband, and he may be right that FLPMA can substitute for the Antiquities Act in many cases. Even so, several counterarguments can be made. One is based on the assumption that sometimes, even in a democracy, it is good for the president to be able to make unilateral decisions on crucial issues. At the risk of draw-

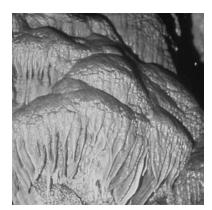


Olympic National Park originated as Mount Olympus National Monument. Photo courtesy of the National Park Service.

ing disproportionate parallels, think of the leeway given to the president in setting foreign policy, or in nominating members of the cabinet. While these are subject to some measure of congressional oversight and even formal approval, by custom the president is usually allowed to exercise strong leadership in these realms. This is so precisely because the potential for paralyzing fractiousness is so high under any other scenario. One could plausibly argue that conservation policy, with respect to the management of public lands, is a like category,

both in terms of its momentousness and the potential for decision-making to become mired in the quicksand of partisan politics. The story told by Andrus and Freemuth about the Carter monuments is a case in point. Furthermore, the special nature of land withdrawals tends to pit local interests against national ones, and to the extent that members of Congress are reluctant to override objections to a proposed land withdrawal from the delegation of the state involved, the process is hog-tied. If that is considered undesirable, then it is a good thing for the president to be able to cut this Gordian Knot using the power bestowed by the Antiquities Act.

Part of Rasband's argument is that the ends do not justify the means, and that the process of the Act does not live up to the wilderness ideals that its resulting monuments promote. Yet one can respond that the quality of the ends achieved is, in fact, important to consider. Moreover, wilderness values are not the only ones being protected by large natural-area monuments. David Harmon brings out both these points in his chapter.22 Arguing from the concept of ecological significance, he shows how these monuments variously exemplify rarity, superlativeness, representivity, and ecological integrity. The full worth of these qualities emerges only when placed in a larger systems context. For example, the features preserved in the geological and cave monuments are interesting in themselves, but they disclose added value when considered as contributors to worldwide geodiversity. Similarly, individual World Heritage sites are spectacular places to visit, yet their importance truly blossoms only when understood as parts of a global system of recognition of places of outstanding universal value. The same holds for monuments as



Jewel Cave National Monument, South Dakota. Photo courtesy of the National Park Service.

components of ecoregional representivity schemes and as units in a network monitoring the "Vital Signs" of ecological integrity. In all these areas the Act has made crucial contributions to the evolving practice of nature conservation.

Another argument against amending the Act is that its most recent uses are more flexible and more cognizant of local interests-that application of the law is evolving to meet new needs and desires. As told by Elena Daly and Geoffrey B. Middaugh, the Bureau of Land Management's new National Landscape Conservation System is positioning itself to become a systematic exemplar of the "new paradigm" of protected areas. A major shift in conservation theory, the new paradigm holds that the future expansion of protected areas will come less and less from new Yellowstone-model exclusionary parks and more and more from protected landscapes and managed resource extraction areas.23 These are essentially multiple-use areas with a stronger preservationist/protectionist management overlay than that found on lands as traditionally managed by the BLM. Whether the bureau can make the new paradigm work in an American political context, and whether it can establish a true distinction between its new monuments and other BLM lands, remains to be seen. But clearly, armed now with an organic act (FLPMA, passed in 1976) and charged with a newfound mission of creating a different kind of national monument, the BLM is poised to transcend its lineage as the bureau in charge of the leftover lands nobody wanted.<sup>24</sup>

The BLM has also been given the task of co-managing two new national monuments along with the National Park Service. The field report from one of them, Grand Canyon-Parashant National Monument, is largely a story of the difficulties in getting two very different agency cultures to mesh.25 The authors, Parashant co-superintendents Darla Sidles (NPS) and Dennis Curtis (BLM), candidly admit that many field staff from both sides looked at co-management as the bureaucratic equivalent of a shotgun wedding. Indeed, the first organizational structure for Parashant did not work and had to be replaced. But persistence is beginning to pay off: Sidles and Curtis give us a supervisor's-eye view of how the monument is drawing from both BLM and NPS policies and practices to come up with

Grand Canyon-Parashant National Monument. Photo courtesy of the National Park Service.



innovations in such basic park functions as signage, interpretive planning, vehicle use management, and more. Parashant is an unfinished experiment, but that is precisely the point: there is nothing in the Antiquities Act that prohibits flexibility in how protection is achieved, or by whom. While most monuments are still under the exclusive jurisdiction of the National Park Service. thanks to the Carter and Clinton proclamations several are now managed or co-managed by the BLM, U.S. Forest Service, U.S. Fish and Wildlife Service, and, in one instance, the Armed Forces Retirement Home. We can expect that as these new monuments mature, the respective managing agencies will place their own stamp on them.<sup>26</sup> It is even conceivable that we will see new national monuments that are comanaged by one or more federal partners in concert with nonfederal entities, such as tribal, state, or local governments, or with nonprofit organizations.

We might also witness the application of the Antiquities Act to an entirely new frontier: the oceans. Conservation of the sea is fundamentally different from that on land. for a variety of biophysical, ecological, political, social, and legal reasons. Brad Barr and Katrina Van Dine endorse the notion that tools such as the Act need to be available to visionary leaders so that they may look beyond the concerns of the moment to the needs of future generations, especially in the ocean realm. Marine ecosystems can be irreparably damaged in a surprisingly short time. The conventional course toward designating a new national marine sanctuary can takes years because of public involvement requirements—during which lag time fisheries can collapse, seabeds be devastated by bottom-trawling, and ecosystem structure be seriously compromised. The



California Coastal National Monument. Photo courtesy of the Bureau of Land Management.

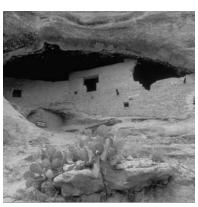
authors observe that "the political will to move forward with a controversial proclamation of a national monument can buy time for building constituencies of support" while simultaneously safeguarding marine ecosystems. Used strategically, Barr and Van Dine conclude, the Antiquities Act "has the potential to accomplish what may be considerably more difficult to do without it, and offers more certainty that effective protection will be achieved."

In assessing the overall value of the Act, we must emphasize again that it is about more than just national monuments. We must recognize as well the indisputable importance of the Act to the development of archaeology and historic preservation in America, Francis P. McManamon makes the critical point that there was nothing foreordained about the basic policies governing the public interest in archaeological sites— "the need for well-qualified individuals with sufficient institutional support to conduct archaeological investigations, and the fundamental commemorative, educational, and scientific values of archaeological resources."28 We take these for granted today, but in 1906 Congress could just as

20

well have "solved" the looting problem by adopting a less comprehensive, more commercially oriented approach that emphasized recovery and display, or even the sale, of individual items rather than preservation of whole sites in context. Congress could have ignored the requirement for careful recording, analysis, and reporting as essential elements of archaeological investigations and overlooked the requirement of public interpretation and stewardship of collected artifacts and data. In 1906 it would have been a defensible position to take; after all, American archaeology was in its infancy and had no long-standing tradition of professional standards. As we can clearly see now, that would have been a far less satisfactory solution. Beyond this, McManamon sees a vigorous legal lineage extending from the Antiquities Act through later federal historic preservation law. However, as he goes on to point out, several court cases in the 1970s deemed the Act too vague to be used to prosecute criminal looting. To remedy this, Congress could have amended the Act. Significantly, it chose to leave the venerable law intact, instead passing a new, targeted statute, the Archaeological Resources Protection Act of 1979

Gila Cliff Dwellings National Monument, New Mexico. Photo courtesy of the National Park Service.



Joe E. Watkins provides a Native American's perspective on the Act. He associates it with the federal government's campaign to make American Indians disappear, both physically (through military action) and culturally (by "de-Indianizing" them). After all, during the Act's formative years economic, social, and political tensions also produced the Wounded Knee massacre, the expropriation of American Indian lands by the Jerome and Dawes Commissions, and the destruction of tribal sovereignty by the Curtis Act, although there are no direct contemporary links between the Act and these tragic events. The Antiquities Act, in recognizing the developing professionalism in American archaeology, privileged archaeologists, historians, and scientists, putting American Indian objects and sites, as well as their interpretation, in the public domain, under the control of non-Indian experts in museums and universities. Unfortunately, the experts too often reduced Native American cultures, and to some degree Indian people themselves, to the status of data to be described, organized, and salvaged before they disappeared. Then too, some of the natural-area national monuments proclaimed under the Act also subverted Indian culture by disregarding their status as sacred sites. Watkins concludes that "in some ways the Antiquities Act of 1906 can be seen to be a continuation of government policies that were aimed at erasing the image of the contemporary American Indian from the landscape in favor of the 'dead and disappearing culture' destined to exist only in museums or to be engulfed in mainstream America."29 Yet he too sees the Act as the direct ancestor of laws that have given rise to, among other things, a growing number of autonomous Tribal Historic Preservation Offices.

Jerry L. Rogers also traces the source of systematic historic preservation back to 1906 and the Antiquities Act, which, along with the Historic Sites Act of 1935 and the National Historic Preservation Act of 1966. "launched a national idea of historic preservation." In addition, these laws "consolidated federal leadership of the field in the National Park Service, and spread their effects throughout an amazingly extensive and effective network in the United States." Importantly, he also emphasizes how the field of historic preservation, like that of nature conservation, is not remaining static. Innovations in identifying intangible cultural heritage and protecting cultural landscapes—which draw from the some of the same ideas as does the "new paradigm" of protected areas-challenge the National Park Service and other monument-manag-



Minidoka Internment National Monument, Idaho. Photo courtesy of the National Park Service.

ing agencies in ways not seen before. Rogers specifically calls on the Park Service to abandon its bunker mentality with respect to the Clinton-era monuments assigned to other agencies. Rather, NPS should try to constructively influence the others' management standards and philosophies. Doing so calls for a "bold leadership posture" that

risks "the security of past gains for the possibility of greater future gains." Here again we see the effects of the Antiquities Act playing out in fresh and unexpected ways.

WHAT, THEN, CAN WE CONCLUDE ABOUT THIS remarkable, still-controversial law? To some, it has been a callous abuse of presidential power; to others, a triumph of presidential vision. To American Indians, it has had a unique and often troubling meaning. The most basic question, however, is this: is the Antiquities Act a bad law, or a good law?

One way to answer that question is to pose some others: think of what the American landscape would look like today had the Act never been passed. Would anything at all be left of Chaco, Wupatki, Bandelier, and a host of other pre-Columbian sites in the Southwest? Would the irreplaceable earthworks of Effigy Mounds or Hopewell Culture still be intact? Would the shorelines of Acadia and Olympic have long since been sold off for vacation homes? Would the public be able to enjoy the fantastic landscapes and rock formations of Arches, Zion, Bryce Canyon, Capitol Reef, or Rainbow Bridge? Would the Grand Canyon be bordered by rim-side trophy houses of the rich and shot through with private trails, toll roads, and spurious mine claims? Would we have preserved such ecologically important (but less obviously scenic) places as Joshua Tree, Saguaro, and Organ Pipe Cactus? Or the paleontological treasures of Dinosaur? Would we have missed out on preserving Edison's laboratory, the historic towpaths along the Potomac at C&O Canal, and the Japanese-American internment camp at Minidoka? What would have become of Katmai-the fabled Valley of Ten Thousand Smokes? Of Glacier Bay? Of Wrangell-St. Elias and tens of millions of other acres of public land in Alaska?

The Antiquities Act, like other legal landmarks of American archaeology, historic preservation, and nature conservation, is the product of intentions and actions that don't always measure up to, and sometimes contradict, our stated national ideals. But the conservation of the country's natural and cultural heritage always has been a work in progress. It must continue to be, for it is a job that by its very character can never be finished. Effective conservation requires constant self-evaluation and a willingness to accept criticism. It is important, therefore, to honestly criticize the Antiquities Act for failing to achieve a better record in fostering democratic participation in decision-making, for not going about the protection of "objects of historic and scientific interest" in a more systematic manner, for contributing to the "imperial presidency," for failing to adequately acknowledge the interests of local communities, for helping to dispossess Native Americans of their past. Important to criticize, and seek to improve—but not to condemn. For if we insist on holding the Act to an impossibly high standard, and are willing to seriously weaken or even annul it on these grounds, we must be prepared to do the same for a great many other laws whose effects reach into every corner of American life.

A more judicious approach is to assess, to the best of our ability, whether the benefits of the Act have outweighed the drawbacks. As just noted, this assessment must forever be provisional, always remaining subject to periodic re-evaluation in the light of new facts and new sensibilities. All we can do is pass interim judgment from a particular point in time. From where we sit in 2006, our judgment is that, on balance, the

Antiquities Act has served this country very well. An America without the Antiquities Act would be one with a much shallower perspective on the past. It would have far less capacity to correct this problem, for it would lack the professional cultural heritage expertise necessary to do so. It would be much less beautiful, with much less ecological integrity. It would be far more commercial, and burdened with a meaner civic spirit.

When the Act was passed in 1906, the clock was running down on the first, expansionist phase of American history. Now, a hundred years later, a momentous century looms ahead. It may yet prove to be a Century of Conservation, whose main challenges will be effectively meeting the demands of modern life while maintaining the cultural, historical, and natural environments that we have come to cherish and expect. The world is becoming evermore crowded with people, and pressures on archaeological sites, historic resources, and the few remaining natural areas are only

becoming more dire. With isolationism becoming less and less viable, the need for citizens to appreciate and value the full diversity of the American past, and of the people (both ancient and modern) who contributed to it, has never been greater. The protections realized by the Antiquities Act have left us in a much better position to deal with these challenges. Over the past century, more inclusive ideals and new ways of thinking have raised important challenges to the foundations of American archaeology, historic preservation, and nature conservation, challenges that must be considered and addressed. Yet the edifice that stands on the foundation, the legal framework that protects and helps us understand America's natural and cultural heritage, is indispensable. The Antiquities Act, for all its own flaws, is a cornerstone of that structure. That is reason enough to celebrate its first hundred years of achievement, and to look forward to new and innovative uses being made of it in the century to come.

#### **Endnotes**

- 1. Confusingly, there are numerous other parks and protected areas, authorized through regular congressional legislation rather than through the Antiquities Act, that are designated "National Monument" (or were at the time of their creation). Examples include Agate Fossil Beds, Badlands (now National Park), Booker T. Washington, Canyon de Chelly, Congaree Swamp (now Congaree National Park), El Malpais, Mount Saint Helens Volcanic National Monument (managed by the U.S. Forest Service), and Pecos (now National Historical Park), among many others. Throughout this paper, the term "national monument" will be used as a shorthand for any park or protected area, no matter what its current designation, that originated or was expanded through the use of the Antiquities Act—thereby excluding such parks as those listed above. See also Squillace 2006.
- 2. Wrangell-St. Elias and Glacier Bay actually are part of a single World Heritage site made up of a complex of parks, including several in Canada.
- 3. The primacy of a non-commercial value in United States public policy for other kinds of cultural and historic resources continues from its foundation in section 3 of the Antiquities Act to the 1935 Historic Sites Act, the 1966 National Historic Preservation Act, and the 1979 Archaeological Resources Protection Act, the four most important cultural resource

statutes of the twentieth century. See McManamon 2006, Rogers 2006.

- 4. Regarding paleontology: "Despite the conflicting interpretations of whether Congress intended for the phrase "objects of antiquity" to include paleontological resources, the Antiquities Act served for nearly seventy-five years as the primary authority for the protection and permitting of fossils on lands administered by the Departments of Agriculture and Interior" (Santucci 2005:1).
- 5. Before the Antiquities Act was passed, biology played a role in creating Sequoia, Yosemite, and General Grant (now part of Kings Canyon) national parks, as it did in some early proposals for boundary changes. Still, "evidence that biologic and geologic considerations influenced selection of national monuments is more certain..." (Shafer 1999:190). Once the Act was passed, a related question arose as to the difference between a national monument and a national park. To some, the monuments were national-parks-in-waiting: "Some confusion has arisen as to the difference between parks and monuments.... The object of a monument is the preservation from destruction or spoliation of some object of historic, scientific, or other interest. The object of a park is that and something more; namely, the development of the area reserved for its more complete and perfect enjoyment by the people. It might be said that a monument is park raw material, because many of the existing monuments, in all probability, will receive park status when their development as parks is practicable" (Cameron 1922:8). See also Harmon 2006.
- 6. NPS 2005.
- 7. Lee 2006. The unabridged version of Lee's study is available for downloading from the NPS Archeology Program website: www.cr.nps.gov/archeology/pubs/Lee/index.htm.
- 8. See Lee 1970; Snead 2001; and *Preservation of Historic and Prehistoric Ruins, Etc.*, hearing before the Subcommittee of the Committee on Public Lands, April 20, 1904, Senate Document no. 314, 58th Cong., 2nd Sess.
- 9. Hays 1959; Limerick 1987; McManamon 2003.
- 10. As Native Americans now point out, the use of the term "ruins" (along with other common descriptors of ancestral sites, such as "abandoned") implies that these ancient ancestral sites are no longer of any value, when in fact they are often still part of a tribe's living traditions. For a discussion, see Halfmoon-Salazar 2006.
- 11. Several recent studies have made the point that landscapes had to be de-inhabited, stripped of their Native American cultural associations, before they could be reconstructed as being purely natural and then transformed into national parks; see Catton 1997; Keller and Turek 1998; Spence 1999.
- 12. Miller 2006:66.
- 13. Thompson 2006.
- 14. Thompson 2006:46.
- 15. Conard 2006.
- 16. Miller 2006:66-67.
- 17. Rothman 2006.
- 18. Andrus and Freemuth 2006.
- 19. Norris 2004.
- 20. Squillace 2006:112. See also Squillace 2003.

- 21. Rasband 2006.
- 22. Harmon 2006.
- 23. Daly and Middaugh 2006. Categories V and VI, respectively, in the IUCN international category system. The new paradigm has roots in, among other things, the British conception of national parks, international work in cultural landscapes, and interdisciplinary theories of "sense of place." In international protected area work, the new paradigm is gaining in influence. For an introduction, see Phillips 2003. For protected landscapes and category VI areas generally, see Brown et al. 2005.
- 24. The role of the BLM's predecessor, the General Land Office (GLO), is an interesting side story to all of this. As Daly and Middaugh note, the GLO can hardly claim a stellar record for good government, nor was it ever consistently a conservation leader among federal agencies. Nonetheless, a good deal of credit has to be given to the two GLO commissioners active just before the passage of the Antiquities Act, Binger Hermann and W. A. Richards, for proactively withdrawing several key areas pending permanent preservation, among them Mesa Verde (which was made a national park by congressional legislation three weeks after the Act was passed) and Chaco Canyon. Hermann and Richards' repeated attempts to induce national park proposals are an underappreciated chapter in the history of American land conservation.
- 25. Sidles and Curtis 2006.
- 26. In the early years of its existence the National Park Service grossly underfunded the national monuments, paying their managers salaries on the order of \$1 per month, and consequently the level of protection the monuments were afforded was vastly inferior to that given to places designated as national parks. Today, while considerable discrepancies remain among the budgets of individual parks, all of them—no matter how designated—are managed according to a basic set of policies (NPS 2000) that provide for much more consistency across the national park system. For example, the quality and philosophical approach of resource management being done in Bryce Canyon (which is now a national park but began as a national monument) should not in practice differ substantially from that being carried out in comparably sized Bandelier (which began as and remains a national monument). In the new BLM monuments under the National Landscape Conservation System, there is also a basic consistency in that most visitor infrastructure is to be located outside the boundaries in adjacent towns. By contrast, the handful of national monuments under the Forest Service differ greatly in management. For example, the intensity of visitor services and preservationist orientation of Mount St. Helens National Volcanic Monument make it "much more like a national park than a national forest," while at Admiralty Island and Misty Fiords National Monuments in Alaska, management is not much different from that of the adjacent Tongass National Forest. For the Forest Service's management of its monuments, see Williams 2003.
- 27. Barr and Van Dine 2006:257, 252.
- 28. McManamon 2006:161.
- 29. Watkins 2006:196.
- 30. Rogers 2006:176, 185.

#### References

- Andrus, Cecil D., and John C. Freemuth. 2006. President Carter's coup: An insider's view of the 1978 Alaska monument designations. In Harmon et al. 2006, 93–105.
- Barr, Brad, and Katrina Van Dine. 2006. Application of the Antiquities Act to the oceans: Something old, something new, something borrowed, something blue. In Harmon et al. 2006, 251–263.
- Brown, Jessica, Nora Mitchell, and Michael Beresford, eds. 2005. *The Protected Landscape Approach: Linking Nature, Culture and Community*. Gland, Switzerland, and Cambridge, U.K.: IUCN.
- Cameron, Jenks. 1922. The National Park Service: Its History, Activities and Organization. Institute for Government Research, Service Monographs of the United States Government no. 11. New York: D. Appleton and Co.
- Catton, Theodore. 1997. Inhabited Wilderness: Indians, Eskimos, and National Parks in Alaska. Albuquerque: University of New Mexico Press.
- Conard, Rebecca. 2006. John F. Lacey: Conservation's public servant. In Harmon et al. 2006, 48-63.
- Daly, Elena, and Geoffrey B. Middaugh. 2006. The Antiquities Act meets the Federal Land Policy and Management Act. In Harmon et al. 2006, 219–234.
- Halfmoon-Salazar, Virginia. 2006. Changing ideas and perceptions. In People, Places, and Parks: Proceedings of the 2005 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites. David Harmon, ed. Hancock, Mich.: The George Wright Society.
- Harmon, David. 2006. The Antiquities Act and nature conservation. In Harmon et al. 2006, 199–215.
- Harmon, David, Francis P. McManamon, and Dwight T. Pitcaithley, eds. 2006. The Antiquities Act: A Century of American Archaeology, Historic Preservation, and Nature Conservation. Tucson: University of Arizona Press.
- Hays, Samuel P. 1959. Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920. Cambridge, Mass.: Harvard University Press.
- Keller, Robert H., and Michael F. Turek. 1998. *American Indians & National Parks*. Tucson: University of Arizona Press.
- Lee, Ronald F. 1970. *The Antiquities Act of 1906*. Washington, D.C.: National Park Service, Office of History and Historic Architecture, Eastern Service Center. [Reprinted, *Journal of the Southwest* 42:2 (2000), 198–269.]
- ——. 2006. The origins of the Antiquities Act. In Harmon et al. 2006, 15–34.
- Limerick, Patricia Nelson. 1987. The Legacy of Conquest: The Unbroken Past of the American West. New York: W. W. Norton.
- McManamon, Francis P. 2003. Archaeology, nationalism, and ancient America. In *The Politics of Archaeology and Identity in a Global Context*. Susan Kane, ed. Boston: Archaeological Institute of America.
- ——. 2006. The foundation for American public archaeology: Section 3 of the Antiquities Act of 1906. In Harmon et al. 2006, 153–175.
- Miller, Char. 2006. The Antiquities Act, big-stick conservation, and the modern state. In

- Harmon et al. 2006, 64-78.
- Norris, Frank B. 2004. A historical overview of consumptive use patterns in National Park Service areas. In *Protecting Our Diverse Heritage: The Role of Parks, Protected Areas, and Cultural Sites.* David Harmon, Bruce M. Kilgore, and Gay E. Vietzke, eds. Hancock, Michigan: The George Wright Society, 326–327.
- NPS [National Park Service]. 2000. National Park Service Management Policies 2001. Washington, D.C.: NPS.
- ——. 2005. *The National Parks: Shaping the System*. Rev. ed. Harpers Ferry, W.Va.: Harpers Ferry Center, NPS.
- Phillips, Adrian. 2003. Turning ideas on their head: The new paradigm for protected areas. *The George Wright Forum* 20:2, 8–32.
- Rasband, James R. 2006. Antiquities Act monuments: The Elgin Marbles of our public lands? In Harmon et al. 2006, 137–150.
- Rogers, Jerry L. 2006. The Antiquities Act and historic preservation. In Harmon et al. 2006, 176–186.
- Rothman, Hal. 2006. Showdown at Jackson Hole: A monumental backlash against the Antiquities Act. In Harmon et al. 2006, 81–92.
- Santucci, Vincent L. 2005. Fossils, objects of antiquity, and the Antiquities Act (1906). Unpublished manuscript. McLean, Virginia: National Park Service.
- Shafer, Craig L. 1999. History of selection and system planning for US natural area national parks and monuments: Beauty and biology. *Biodiversity and Conservation* 8, 189–204.
- Sidles, Darla, and Dennis Curtis. 2006. Co-managed monuments: A field report on the first years of Grand Canyon–Parashant National Monument. In Harmon et al. 2006, 235–250.
- Snead, James E. 2001. Ruins and Rivals: The Making of Southwest Archaeology. Tucson: University of Arizona Press.
- Spence, Mark David. 1999. Dispossessing the Wilderness: Indian Removal and the Making of the National Parks. New York and Oxford: Oxford University Press.
- Squillace, Mark. 2003. The monumental legacy of the Antiquities Act of 1906. *Georgia Law Review* 37:2, 473–610.
- ——. 2006. The Antiquities Act and the exercise of presidential power: The Clinton monuments. In Harmon et al. 2006,106–136.
- Thompson, Raymond Harris. 2006. Edgar Lee Hewett and the politics of archaeology. In Harmon et al. 2006, 35–47.
- Watkins, Joe E. 2006. The Antiquities Act at one hundred years: A Native American perspective. In Harmon et al. 2006, 187–198.
- Williams, Gerald W. 2003. National monuments and the Forest Service. Unpublished manuscript, November 18.

# THE ICOMOS-ENAME CHARTER: NEW PRINCIPLES FOR INTERPRETING CULTURAL HERITAGE SITES

#### The ICOMOS-Ename Charter Initiative: Rethinking the Role of Heritage Interpretation in the 21st Century

Neil Silberman

"OF MAKING MANY BOOKS THERE IS NO END," writes the biblical author of Ecclesiastes—and so it seems that of the making of many international heritage conventions, principles, and guidelines there also seems to be no end in sight. Beginning with the 1931 Athens Charter for the Restoration of Historic Monuments, through the 1964 Venice Charter, and continuing with the recent adoption of the 2003 ICOMOS Charter for the Analysis, Conservation and Structural Restoration of Architectural Heritage, the international heritage community has produced and ratified a long line of doctrinal texts setting out standards for best practices in the conservation and maintenance of cultural resources all over the world. Still, there remains a gap in the international consensus. While most existing cultural heritage charters and documents deal primarily with issues of physical conservation and site management, none specifically addresses the principles of effective *communication* of the significance of cultural heritage sites.

The activity of physical conservation is the indispensable core and focus of all attempts to preserve the material heritage for future generations, yet it is entangled in a dense web of political, economic, social, and even psychological relationships that—if ignored—can doom even the most sophisticated conservation projects to neglect and eventual destruction. International guidelines for physical conservation have indeed been broadened and strengthened in recent years by the formulation of international standards on professional training, heritage tourism, and procedures for site management that address the importance of site

interpretation in varying degrees of detail. But few have examined the direct relationship between various interpretation types, methods, and technologies and the wider social context, conservation rationale, or the ultimate sustainability of cultural heritage sites.

Admittedly, interpretation is an exceedingly abstract and subjective concept, when compared to the tangible conservation challenges of frescoes, mosaics, stonework, and earthen architecture. Yet no less than ancient pigments, tesserae, ashlars, and mudbricks, interpretation gives life to the ideas and images that determine how

people relate to the material remains that surround them. The sheer effort invested in interpretation in recent years is clear evidence of this perceived importance. Traditional didactic, museum-type text displays are now utilized mostly when budgetary constraints mandate only the cheapest, no-frills presentation. More creative and energetic interpretive solutions, such as special-interest or thematic guided tours, costumed or character-based interpreters, special educational activities, and interactive applications and virtual reality experiences are usually utilized when the project budget permits. But they are of widely differing cost, quality, and technical means. And their impact on visitors, on attendance figures, and indeed on the perception of the site as a whole among the local community have only now begun to be studied in great detail.

There is another ominous development in the heritage field that further underlines the need for a closer examination of site interpretation. In an era when public culture budgets are shrinking and cultural institutions of all kinds are being forced to become self-sustaining, the choice of site interpretation methods and technologies is often determined by their ability to stimulate local economic development: by paid admissions, subsidiary sales of postcards and other museum-shop items, employment opportunities, and a steady flow of tourist revenue for hotels, shops, and restaurants in the immediate vicinity. All too often, finances and balance sheets are now allowed to become the real tyrants in determining how cultural heritage sites are presented to the public. This transformation of cultural heritage sites into venues for tourism and leisure-time entertainment poses great dangers for the cause of conser-

vation in the long-run. If the right balance is not achieved between the contribution of outside scholars, exhibit designers, and heritage professionals and the local community, the site development project, even if financially successful, can appear to local residents as an outside imposition—like a shopping mall or private theme park—with solely or mainly economic significance for the community. It can also sow resentment among those not immediately benefiting from the gains, and who often suffer from the successful site's side effects-a lack of parking, traffic congestion, and disruption of normal routines. It can thus be dismissed as "someone else's" monument, an alien intrusion not meaningfully integrated into the memories, stories, and attitudes that constitute the entire community's shared identity.

Economic success, of course, is by no means guaranteed. Some sites, no matter how meticulously researched and elaborately developed, will never attract large numbers of visitors, for the routes of tourism are exceptionally inflexible, based less on content than on the convenience of nearby highways and airports, the pressures of itinerary planning, and the most comfortable facilities. Although everything may look perfect to the invited dignitaries and guests at an elaborately preserved and interpreted site on a festive opening day, three to five years later, when unrealistic expectations of increased visitation have failed to materialize and the costs of adequate staffing, maintenance, and regular content updating have soared, a site's degraded physical state and its outdated interpretive infrastructure can cripple its usefulness as a viable, valuable memory institution for both outside visitor and for the members of the local community.

#### History of the Ename Charter initiative

These concerns about interpretation plans and methods served as the impetus for the formulation of a charter that might achieve international consensus about the intellectual, ethical, social, and economic contexts in which heritage interpretation might be most effectively and constructively carried out. In the spring of 2002, an initial draft was formulated by the staff of the Ename Center, based on close consultation with a range of international colleagues, and following the model of earlier charters in the cultural heritage field. This first draft was circulated widely during the summer of 2002 in anticipation of the Ghent Conference on Heritage, Technology and Local Development later that year.

The structure of this first draft of the Ename Charter for the Interpretation of Cultural Heritage Sites was entirely focused on the role of heritage professionals in the interpretive process. Its central theme was the importance of integrated planning-in which the interpretation would not be seen merely as a matter of information transmission or scenography meant to fill the silences and empty spaces of an otherwise unembellished cultural heritage site. The text was divided into sections on scientific and professional guidelines; planning, funding and management; tourism aspects; and heritage education. Its goal was to address the most common planning and management problems that had time and again doomed meticulously (and expensively!) developed sites to become deteriorating eyesores in just a few years.

As a follow-up to the discussions in Ghent, a special roundtable discussion on the Ename Charter was organized by the U.S. National Park Service in Washington on 13 November 2002. The National Park

Service's chief archaeologist, Francis P. McManamon, brought together representatives of the Ename Center, of numerous NPS programs and departments, as well as of the U.S. Advisory Council on Historic Preservation, Bureau of Land Management, Forest Service, Archaeological Institute of America, Society for Historical Archaeology, Archaeological Conservancy, and the University of Maryland Center for Heritage Resource Studies and Historic Preservation Program. Also present was Gustavo Araoz, executive director of US/ICOMOS (the U.S. National Committee of the International Council on Monuments and Sites). The discussions at this roundtable were fruitful, highlighting common concerns and emphasizing the need for this document to go beyond planning issues into the larger social implications of heritage interpretation. Araoz, also serving as the ICOMOS International vice-president for international scientific committees, encouraged further development of the charter and a closer working relationship with the international scientific committees and national committees of ICOMOS International.

In January 2004, the executive committee of ICOMOS agreed that the work of review and revision of what would now be called the "ICOMOS-Ename Charter" would be undertaken under the auspices of a small editorial group consisting of international vice-presidents Gustavo Araoz and Sheridan Burke; the international secretarygeneral, Dinu Bumbaru; and the international treasurer, Giora Solar (who were appointed to this group by ICOMOS President Michael Petzet), working closely with a team chosen by the Ename Center (consisting of Ename Center director Neil Silberman and former ICOMOS secretarygeneral Jean-Louis Luxen).

Unlike other charters in the past, whose drafting and initial review process was the responsibility of a particular ICO-MOS International Scientific Committee (ISC), the ICOMOS-Ename Charter's relevance to a range of specializations within the heritage disciplines-and its potential importance to a wide range of stakeholder groups-lessened the need for a single sponsoring ISC. Accordingly, it was decided to distribute an initial draft of the text to all of the ICOMOS ISCs as well as a small group of interpretation professionals for overall comments, reactions, and suggestions. This first round of ISC review took place during the period April-June 2004. At the conclusion of this review cycle, Draft Two (dated 24 June 2004) was distributed to all national committees of ICOMOS. By the end of August 2004, Draft Three (dated 23 August 2004) was produced by the editorial committee, integrating the many detailed comments received from ICOMOS national committees, individual scholars and experts, and the executive committee of ICOMOS.

#### Presentation versus interpretation

Through continuous and intensive consultation, the text has evolved considerably from its earlier form that was more narrowly focused on the concerns of heritage professionals into a more broadly based document dealing with seven main principles that firmly position heritage interpretation as a contemporary activity within a wider social context. One of the most important conceptual insights that arose in the course of the charter review process was the distinction that should be made between the terms "presentation" and "interpretation" when referring to cultural heritage sites. "Presentation" denotes the

carefully planned arrangement of information and physical access to a cultural heritage site, usually by scholars, design firms, and heritage professionals. As such, it is largely a one-way mode of communication. "Interpretation," on the other hand, denotes the totality of activity, reflection, research, and creativity stimulated by a cultural heritage site. Although professionals and scholars play important roles in this process, the input and involvement of visitors, local and associated community groups, and other stakeholders of various ages and educational backgrounds should be seen as essential to the goal of transforming cultural heritage sites from static monuments into places of learning and reflection about the past, as well as valuable resources for sustainable community development and intercultural and intergenerational dialogue.

To that end, each of the main principles deals with a theme in which in which the broader and more inclusive interpretive activity can and should be encouraged.

Principle 1: Access and Understanding suggests that the public discussion of a site's significance "should be facilitated by effective, sustainable Interpretation, involving a wide range of associated communities, as well as visitor and stakeholder groups." Access here refers to both intellectual and physical access, highlighting the role of interpretation can play in offering a direct connection between the heritage resource and the personal experiences and challenges of the contemporary community. These include the provision of multilingual programs (where appropriate and necessary), facilities for persons with physical disabilities, and respect for cultural sensitivities (as in places of worship and other sacred places) where the need for public

interpretation must be balanced with the traditional function and contemporary significance of the site.

Principle 2: Information Sources suggests that the informational content conveyed at cultural heritage sites must "be based on evidence gathered through accepted scientific and scholarly methods as well as from living cultural traditions." In contrast to more traditional presentations of sites that focus largely on the public communication of scholarly evaluations, the Charter urges that artistic, literary, and memory-based interpretation be included alongside the more strictly historical, archaeological, and scientific material. It also stresses the importance of maintaining full documentation of the sources from which the various types of information come.

Principle 3: Context and Setting recommends that the interpretation of cultural heritage sites should relate to their wider social, cultural, historical, and environmental contexts—in both an intellectual and a physical sense. The selective focus on certain periods of interest or historical actors, or the designation of a site as either cultural or natural, lessens its value as a means to appreciate its full significance as an element in the contemporary landscape.

**Principle 4: Authenticity**, while recognizing the difficulty and subjectivity of this term, nonetheless outlines certain standards regarding the use of reconstructions and advises against irreversible alterations to the physical integrity of the site that are undertaken for the purposes of interpretation alone. In addition, it acknowledges that potential danger that the classification of a place as a "heritage site" may pose to its traditional social functions.

Principle 5: Sustainability deals with

the potentially disruptive effects of interpretive technologies, facilities, and costs both on the physical stability of the cultural heritage site and its financial viability. In response to the increasing reliance on elaborate interpretation as an essential component of income-generating "heritage attractions" (both public and private), the charter stresses the importance of rational planning rather than unrealistic expectations or unanalyzed side-effects of tourist development.

Principle 6: Inclusiveness seeks to ensure that the interpretation of a cultural heritage site is not merely a carefully scripted presentation prepared by outsiders, but should "actively involve the participation of associated communities and other stakeholders." Whether regarding the presentation of a community's heritage, the physical plans for the site's physical development, or the economic opportunities for employment and economic benefit by local residents, an interpretation program must be seen as a community activity rather than an alien imposition.

Principle 7: Research, Evaluation, and Training stresses that the "interpretation of a cultural heritage site "should not be considered to be completed with the establishment of a specific interpretive infrastructure" but must be seen as a dynamic, long-term activity that include continuous training, updating, and outreach into the community—and to other heritage sites around the world.

In sum, the ICOMOS-Ename Charter asserts that the raising of visitor attendance figures or increasing visitor attendance alone should not be the only target or criterion of success in the interpretation of cultural heritage sites. The communicated—and reflected upon—significance of a site

must also serve a range of educational and social objectives for the benefit of the local community. The underlying rationale for all of these recommendations is the achievement of a basic and far-reaching interpretive transformation: Not of a freshly excavated or conserved site into a beautifully and entertainingly presented attraction—but rather into an active, dynamic cultural institution within a *living* community.

### The Future of the ICOMOS-Ename Charter

The charter text continues to benefit from continuing review and revision; a Revised Third Draft was compiled in the summer of 2005 (see accompanying article for the complete text) and further updates and information about the charter initiative can be found at the charter website (www.enamecharter.org; Figure 1). The

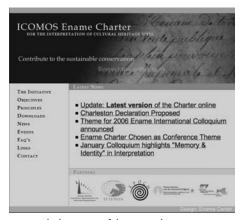


Figure 1. The home page of the Ename Charter.

intention now is to continue the cycles of reviews and revision that will eventually produce a Fourth Draft, more comprehensively reflecting international consensus on the guiding principles of heritage interpretation. This will be used as the basis to launch a more exhaustive global dialogue on interpretation that will engage ICOMOS committees, individual members, and interested scholars and professionals in more dynamic, interactive forums, such as national, regional, and international workshops, conferences, and electronic discussion groups.

There is no question that interpretation has great potential for stimulating a public interest in conservation. But it can only do so when all of the potential conservers-from scholars, to design consultants, to heritage administrators, to business people, to community groups, to religious organizations, to neighbors and supporters—even to a bored, unemployed 17-yearold with a can of spray paint—are meaningfully involved in what is perceived as a community effort and have reason to consider the site not only "theirs," but also an important part of their lives. Interpretation is at the heart of conservation and heritage conservation is a vital focus of collective memory.

Of the making of books—and of cultural heritage charters—there may indeed be no end. Yet the core aim of the ICOMOS–Ename Charter is to ensure that every community's interpretation of its cultural heritage sites is inclusive, authentic, sustainable, and—yes—an *endless* source of knowledge, inspiration, and reflection about the past's evocative, enigmatic, and always enlightening material remains.

Neil Silberman, Ename Center for Public Archaeology and Heritage Presentation, Abdijstraat 13–15, B-9700 Oudenaarde, Belgium; neil.silberman@enamecenter.org

# ICOMOS-Ename Charter for the Interpretation of Cultural Heritage Sites

Revised Third Draft, 5 July 2005

#### Preamble

Just as the Venice Charter established the principle that the protection of the extant fabric of a cultural heritage site is essential to its conservation, it is now equally acknowledged that Interpretation<sup>1</sup> of the meaning of sites is an integral part of the conservation process and fundamental to positive conservation outcomes.

A significant number of charters, principles, and guidelines, including the ICOMOS Charter for the Protection and Management of the Archaeological Heritage (1990), the Nara Document on Authenticity (1994), the Burra Charter (1999), the ICOMOS International Charter on Cultural Tourism (1999), and the Principles for the Conservation of Heritage Sites in China (2002), have emphasized the fundamental role of sensitive and effective interpretation in heritage conservation.

The aim of this Charter is to define the basic objectives and principles of site interpretation in relation to authenticity, intellectual integrity, social responsibility, and respect for cultural significance and context. It recognizes that the interpretation of cultural heritage sites can be contentious and should acknowledge conflicting perspectives, and their open and honest recognition can significantly enrich contemporary reflections about the significance of heritage.

Although the objectives and principles of this Charter may equally apply to off-site and online interpretation, its main focus is interpretation at, or in the immediate vicinity of cultural heritage sites.

The Charter seeks to encourage a wide public appreciation of cultural heritage sites as places and sources of learning and reflection about the past, as well as valuable resources for sustainable community development and intercultural and intergenerational dialogue.

#### **Objectives**

This charter seeks to establish principles of cultural heritage interpretation in order to:

- Facilitate understanding and appreciation of cultural heritage sites and foster public awareness of the need for their conservation. The effective interpretation of heritage sites across the world can be an important medium for intercultural and intergenerational exchange and mutual understanding.
- Communicate the meaning of cultural heritage sites through careful, documented

- recognition of their significance, including their tangible and intangible values, natural and cultural setting, social context, and physical fabric.
- **Respect the authenticity** of cultural heritage sites, by protecting their natural and cultural values and significant fabric from the adverse impact of physical alterations or intrusive interpretive infrastructure.
- Contribute to the sustainable conservation of cultural heritage sites, through effective financial planning and/or the encouragement of economic activities that safeguard conservation efforts, enhance the quality of life of the host community, and ensure long-term maintenance and updating of the interpretive infrastructure.
- Ensure inclusiveness in the interpretation of cultural heritage sites, by fostering the productive involvement of all stakeholders and associated communities in the development and implementation of interpretive programs.
- Develop technical and professional standards for heritage interpretation, including technologies, research, and training. These standards must be appropriate and sustainable in their social contexts.

#### **Principles**

**Principle 1: Access and Understanding.** The appreciation of cultural heritage sites is a universal right.<sup>2</sup> The public discussion of their significance should be facilitated by effective, sustainable Interpretation, involving a wide range of associated communities, as well as visitor and stakeholder groups.

- 1.1 The primary purpose of interpretation should be to communicate the values and range of meanings of cultural heritage sites. Effective interpretation should enhance experience, increase public respect and understanding of the significance of the sites, and should also communicate the importance of conservation.
- 1.2 Interpretation should aim to encourage individuals and communities to reflect on their own perceptions of the site and their relationship to it. Effective interpretation should establish an emotional connection to the site and provide insights—as well as facts. It should seek to stimulate further interest and learning.
- 1.3 Interpretation should be considered an integral part of the conservation process. It should explain the specific conservation problems encountered at the site, as a means of enhancing public awareness of the threats to the site's physical integrity.
- 1.4 Interpretation is a dynamic, ongoing activity, in which the possibility of multiple perspectives should not be excluded. All associated communities and stakeholders should have an opportunity to be involved in the development of heritage interpretation programs as both their right and their responsibility.
- 1.5 Interpretation programs should identify and assess their audiences demographically
  and culturally. Every effort should be made to ensure that heritage interpretation meets
  the needs of its varied audiences and is accessible to a wide public, in all its diversity,
  including persons with disabilities.
- 1.6 The diversity of language among visitors and associated communities connected with a heritage site should be reflected in the interpretive infrastructure.

• 1.7 Physical access and on-site interpretation of a cultural heritage site may be restricted in some cases, due to cultural sensitivities, conservation issues, or safety concerns. In those cases, interpretation should be provided off-site or by other means such as publications, digital media, videos, or internet websites. It is acknowledged that in some cases, an associated community may prefer not to have a site publicly interpreted.

**Principle 2: Information Sources.** The Interpretation of heritage sites must be based on evidence gathered through accepted scientific and scholarly methods as well as from living cultural traditions.

- 2.1 Interpretation should show the range of oral and written information, material remains, traditions, and meanings attributed to a site. It should also clearly identify the sources of this information.
- 2.2 Interpretation should be based on a well-researched, multidisciplinary study of the site and its surroundings, but should acknowledge that meaningful interpretation also necessarily includes conjecture, hypotheses, and philosophical reflection.
- 2.3 Visual reconstructions, whether by artists, conservation experts, or computer model, should be based upon detailed and systematic analysis of environmental, archaeological, architectural, and historical data, including analysis of building materials, structural engineering criteria, written, oral and iconographic sources, and photography. However, such visual renderings remain hypothetical images and should be identified as such.
- 2.4 At cultural heritage sites where traditional storytelling or memories of historical participants provide an important source of information about the significance of the site, interpretive programs should incorporate these oral testimonies—either indirectly, through the facilities of the interpretive infrastructure, or directly, through the active participation of members of the associated communities as on-site interpreters.
- 2.5 Interpretation activities and the research and information sources on which they are based should be documented and archived for future reference and reflection.

**Principle 3: Context and Setting.** The Interpretation of cultural heritage sites should relate to their wider social, cultural, historical, and natural contexts and settings.

- 3.1 Interpretation should explore the significance of a site in its multi-faceted historical, social, political, spiritual, and artistic contexts. It should consider all aspects of the site's cultural and environmental significance.
- 3.2 The contributions of all periods to the significance of a site should be respected.
   Although particular eras and themes may be highlighted, all periods of the site's history as well as its contemporary context and significance should be considered in the interpretation process.
- 3.3 Interpretation should also take into account the cultural contributions of all communities associated with the site, including minority groups.
- 3.4 The surrounding landscape, natural environment, and geographical setting are all integral parts of a site's historical and cultural significance, and, as such, should be taken

into account in its interpretation.

- 3.5 Intangible elements of a site's heritage such as cultural and spiritual traditions, stories, music, dance, theater, literature, visual arts, personal customs and cuisine should be noted and included in its interpretation.
- 3.6 The cross-cultural significance of heritage sites, as well as co-existing or contested viewpoints, should become part of the interpretation, providing outside visitors as well as local residents and associated communities with a sense of personal connection.

**Principle 4: Authenticity.** The Interpretation of cultural heritage sites must respect their authenticity, in the spirit of the Nara Document (1994).<sup>3</sup>

- 4.1 Interpretation should contribute to the conservation of the authenticity of a cultural heritage site by communicating its significance without adversely impacting its cultural values or having recourse to irreversible alteration of its fabric or the installation of irreversible interpretive infrastructure. Physical reconstruction that permanently changes the character of the site should not be undertaken for the purpose of interpretation alone.
- 4.2 The public interpretation of a cultural heritage site should always clearly distinguish
  and date the successive phases and influences in its evolution, and clearly identify additional interpretive interventions.
- 4.3 Authenticity is a concern relevant to human communities as well as material remains.
   The design of a heritage interpretation program should respect and safeguard the traditional social functions of the site and the cultural practices and dignity of local residents and associated communities. It should also provide an opportunity for wider discussion of shared and conflicting heritage values.

**Principle 5: Sustainability.** The interpretive plan for a cultural heritage site must be sensitive to its natural and cultural environment. Social, financial and environmental sustainability in the long term must be among the central goals.

- 5.1 The development and implementation of interpretive programs must be an integral
  part of the overall management and planning process for a cultural heritage site. The
  potential effect of interpretive infrastructure and visitor numbers on the cultural value,
  physical characteristics, integrity, and natural environment of the site must be fully considered in heritage impact assessment studies.
- 5.2 A wide range of interpretive strategies should be discussed early in the site planning
  process, to assess their cultural appropriateness as well as their economic and technical
  feasibility. The scale, expense and technology of interpretive programs must be appropriate to the location and available facilities.
- 5.3 All technical or technological elements in a site's interpretive infrastructure should be appropriate for local standards and resources. They should be designed and constructed in a manner that will ensure effective and regular maintenance.
- 5.4 All visible interpretive programs and infrastructure (such as kiosks, walking paths, and

information panels) must be sensitive to the character, the setting and the cultural and natural significance of the site, while remaining easily identifiable. The light and sound from concerts, dramatic performances, screens and speakers must be restricted to their immediate area, so as not to affect adversely the surroundings or disturb nearby residents.

**Principle 6: Inclusiveness.** The Interpretation of cultural heritage sites must actively involve the participation of associated communities and other stakeholders.

- 6.1 The efforts and interests of associated communities, property owners, governmental authorities, site managers, scholars, tourism operators, private investors, employees, and volunteers should be integrated into the development of interpretive programs.
- 6.2 Interpretation should serve a wide range of educational and cultural objectives. The
  success of an interpretive program should not be judged solely on the basis of visitor
  attendance figures or revenue.
- 6.3 The traditional rights, responsibilities, and interests of the host community, property
  owners, and associated communities should be respected. These groups should be consulted and have a major role in the planning process of the interpretive program and in
  its subsequent development.
- 6.4 Interpretation activities and subsequent plans for expansion or revision of the interpretive program should be open for public comment and involvement. It is the right and responsibility of all to make their opinions and perspectives known.
- 6.5 Interpretive activities should aim to provide equitable economic, social, and cultural
  benefits to the host community at all levels, through education, training, and the creation
  of economic opportunities. To that end, the training and employment of site interpreters
  from the host community should be encouraged.
- 6.6 Because the question of intellectual property and traditional cultural rights is especially relevant to the interpretation process and its expression in various communication media (such as on-site multimedia presentations, digital media, and printed materials), legal ownership and right to use images, texts, and other interpretive materials should be taken into account in the planning process.

**Principle 7: Research, Evaluation and Training.** The Interpretation of a cultural heritage site is an ongoing, evolving process of explanation and understanding that includes continuing research, training, and evaluation.

- 7.1 The interpretation of a cultural heritage site should not be considered to be completed with the establishment of a specific interpretive infrastructure. Continuing research and consultation are important to furthering the understanding and appreciation of a site's significance and should be integral elements in every heritage interpretation program.
- 7.2 The interpretive program and infrastructure should be designed and constructed in a way that ensures periodic content revision and/or expansion.

- 7.3 Interpretation programs and their physical impact on a site should be continuously
  monitored and evaluated, and periodic changes made on the basis of both scientific and
  scholarly analysis and public feedback. Visitors and members of associated communities as well as heritage professionals should be involved in this evaluation process.
- 7.4 Every interpretation program should be seen as an educational resource and its design should take into account its possible use in school curricula, communications media including the internet, special activities, events, and seasonal volunteer involvement.
- 7.5 The training of qualified professionals in the specialized fields of heritage interpretation, such as conservation, content creation, management, technology, guiding, and education, is a crucial objective. In addition, basic academic conservation programs should include a component on interpretation in their courses of study.
- 7.6 On-site training programs and courses should be developed with the objective of updating and informing heritage and interpretation staff of all levels and associated and host communities of recent developments and innovations in the field.
- 7.7 International cooperation is essential to developing and maintaining standards in interpretation methods and technologies. To that end, international conferences, workshops and exchanges of professional staff should be encouraged. These will provide an opportunity for the regular sharing of information about the diversity of interpretive approaches and experiences in various regions and cultures.

#### **Endnotes**

- 1. For the purpose of the present Charter, *Interpretation* is considered to be the public explanation or discussion of a cultural heritage site, encompassing its full significance, multiple meanings and values. *Interpretive infrastructure* refers to all physical installations, publications (guidebooks, videotapes, digital applications, etc.) and communications media devised for the purposes of interpretation, as well as the personnel assigned to this task.
- 2. As established in the United Nations Universal Declaration of Human Rights (1948), it is the right of all people to "participate freely in the cultural life of the community." The ICOMOS Stockholm Declaration (1998) further notes that "the right to cultural heritage is an integral part of human rights" and that this right "carries duties and responsibilities for individuals and communities as well as for institutions and states."
- 3. See http://whc.unesco.org/archive/nara94.htm.

## Some Background Musings on the Need for an ICOMOS-Ename Charter for the Interpretation of Cultural Heritage Sites

#### Gustavo Araoz

Ed. note: A version of this paper was originally presented at The Alliance of Natural Heritage Areas 2nd International Heritage Development Conference, Nashville, Tennessee, June 2005.

Interpretation of a heritage site much is more that just telling a story to the visitors and the public. Interpretation is the process and the tools through which the full significance and values attributed to a place are transmitted to the public, and in that sense, they become the justification for its preservation. For forty years, ICOMOS and the international heritage community have managed to get by without any detailed guidance on how to articulate a site's significance to the general public, or in other words, how to interpret a heritage site. Why suddenly now does ICOMOS feel that we need a new doctrinal document, a new set of ethical principles for the interpretation of sites? I might venture four interconnected reasons for your consideration and discussion.

Newer categories of heritage sites rely heavily on interpretation. It should be no secret that the more obscure, weak, or ambiguous the value of a heritage site, the greater the need for its interpretation. There was a time when most of the world's inventory of heritage sites needed little or no interpretation: the Pyramids, the Sistine Chapel, the Taj Mahal, the great cathedrals, the U.S. Capitol. They lived for many years with little or no interpretation, and their prestige was undiminished. For these iconic sites, their interpretation was tacit in their mere existence, and everyone understood that. Nonetheless, we cannot deny that interpretation has always been useful; it is the threshold to connoisseurship and to the deeper appreciation for the significance of a place, but basically, interpretation for these

great iconic sites was secondary or supplemental.

As the categories of heritage have expanded over the past 40 years, we have moved to accept places on our registries whose associations with events or trends are neither well known nor understood, and whose visual subtlety, aesthetic impact, and commonality of appearance can say nothing about why a place classifies as heritage. These places need an explanation, or interpretation. Let us recall the much-disputed and misunderstood designation of the landfill in Fresno, California, as a national historic landmark a couple of years ago. The values of the site were never sufficiently well interpreted to the general public. As a result, the National Register and the national historic landmark program were publicly

ridiculed for elevating a landfill to heritage status. The interpretation that the public did not hear is that this site was judged by experts to be of extraordinary significance as a technical victory in regenerating an awful place, and as a symbol of the ability of a community to deal successfully with a big environmental problem.

The public demands and expects the theme park experience. The theme park experience has had a profound effect on the way that heritage sites are presented and interpreted to the public. This is nothing new, because some adhere to the idea that the heritage community invented the theme park to begin with: in Williamsburg in the United States, and in the outdoor architectural museums of Scandinavia. This strange creature that sprang from our midst is now a huge competitor with the heritage industry in attracting visitors, with perhaps the most ironic example of all being Busch Gardens sapping the lifeblood out of the very ancestor that provided the DNA for its own existence: nearby Colonial Williamsburg. This reminds me of the Spanish proverb that warns against breeding crows, because they will pluck your eyes. As theme parks vie with heritage sites in ever-more ferocious competition to capture our nation's leisure time, an alarming number of heritage sites have adopted the ways of mass entertainment to meet the expectations of the average visitor. This has inherent dangers, since to entertain effectively, entertainment must avoid uncomfortable topics and limit mental challenges so as not to disturb visitors who are on automatic pilot.

The development of modern interpretation technologies is accelerating. Closely associated to the theme park syndrome is the application of modern technologies to interpretation. While it is obvi-

ous that virtual realities can be a great tool to interpret a heritage site with minimal impact on its historic fabric, they can begin to render the site itself secondary to the virtual experience, especially as the sensorial stimulation of virtual realities continues to increase. In his Travels into Hyper Reality, the Italian author and semiotist Umberto Eco pointed out how the fake reality river jungle cruise in Disneyland is better than actually going down the real Nile. In Disneyland you are guaranteed that the hippo will always yawn as you sail by, while in the real Nile, the hippos may be elsewhere the day you are there. When fake reality or virtual reality becomes more satisfying than "real reality," a heritage site may be viewed as disposable, and its conservation optional.

Interpretation as entertainment also tends towards heavy-handed techniques that are meant to capture and retain visitors with low attention spans for as long as possible. The technology, infrastructure, and hardware for such presentations have disfigured many heritage sites, diminished the quality of the visit, and often become more important than the site itself. When interpretation relies more on contrived designs, awesome reconstructions, and elaborate programs than on the extant historical evidence, the limits of interpretive propriety have been exceeded.

Heritage has undergone a process of democratization. In an increasingly open society, heritage sites have been appropriated by multiple stakeholder groups, all of them demanding that their story be heard. At one time, not too long ago, the significance of our heritage sites was largely validated by the whole of society, or, at the very least, the uniform acceptance of its universalized value went largely unquestioned.

The Ename Charter addresses the ethics of this process head on. But I, personally, do not know where this approach will take us. If we are to be truly fair and democratic, where are the limits for allowing all selfdefined stakeholders to have their say in the process of interpretation? Today the New Age people are given access to Chaco Canyon, and the neo-Druids to Stonehenge. Where do we stop? Or do we stop at all? Can we or should we expect the Ku Klux Klan to have their say in the Martin Luther King memorial sites? Or the British Royal Family at Independence Hall in Philadelphia to explain why we would be better off today as Crown Colonies? Or the Native Americans in Plymouth Rock to tell us how the advent of Europeans led to genocide? Or the protestants in Vatican City to tell us of the Catholic Church's abuse of temporal powers? Or the neo-Nazis at Auschwitz? The Japanese in Pearl Harbor? Pentagon representatives in Hiroshima? The Mexicans at the Alamo? These are questions that demand an answer.

There was a time when each heritage site had an associated significance that was deeply rooted in the public mind, or at least in certain sectors of the public mind. There was little doubt about what made a place valuable to society. Whatever interpretation was provided used those well-known stories and often searched for related new ones simply to increase visitors' awareness and appreciation of the official values attributed to the site.

Today, however, this is often reversed: instead of a site with an attached story or stories, there are many stories in search of a heritage site that will validate the ideas, beliefs, or interpretations of history that are behind them. This is what makes the

process of identifying, registering, and even preserving a site eminently political. And the great danger with this is that behind the interpretation of these stories in search of a site there is a political or an ideological agenda waiting to be proselytized.

This is nothing new. What is new is the level of intensity with which sites are being identified as bridges to political power. From Ruskin using heritage to reverse the effects of the industrial revolution, to Viollet-le-Duc trying to sell the superiority of French medieval expression, or to Ann Pamela Cunningham using Mount Vernon foster the deification of George Washington and the ideas he was thought to stand for, heritage has always been a political tool to advance public adherence to certain ideals, beliefs, and even myths. Heritage sites always mean something much bigger than their mere architectural accomplishments. In principle, the inscription of a site in the official registers and inventories means that enough people are buying into it such that they agree on the values attributed to the place and are willing to extend to it all the legal benefits inherent in official protection. Correspondingly, many traditionally disenfranchised minority groups feel the need to identify heritage sites and secure for them official recognition for self-validation and public recognition of their right to be a player in the public arena. To do this, they have to link their arguments to a heritage site.

The problem is that precisely because they have been disenfranchised, many of these groups never had or were never given the opportunity to shape and mark the landscape in a way that we could easily identify as traditional heritage. To a certain degree, this is why the concept of heritage

has had to expand to cultural landscapes, to natural places with sacred meanings, and to places where historic events of significance only to some disenfranchised group took place. To the general public, these heritage sites are "new" in the sense that they have navigated through history anonymously and out of the public consciousness, without any patrimonial recognition, at times even by the very group that now claims it. It is only when a specific or emerging vision of history needs validation, and a solid connection is made between a place and a given message, that suddenly it metamorphoses into heritage. Then the message attributed to the site needs to be disseminated broadly-interpreted-to gather sufficient support for its public recognition.

Such sites present a challenge inasmuch as once the match between message and site is achieved, its significance is at risk of being limited to the single value of the one group that identified it, which would easily convert interpretation into propaganda, be it religious, political, or social. This is why the Ename Charter insists that the whole process of identification, recognition, and preservation form part of the interpretive program of a site. Simple decency and honesty demand that the public know who values the site and why.

These are just some of the pitfalls that can befall us in the process of interpretation. There are many others, of course, which the Ename Charter addresses, such as interpretive technology so advanced that it cannot be properly maintained; interpretative programs that are beyond the site's budget; and even the old-fashioned exhibit design. I urge you to read the charter and think about it with care. Over the next three years, US/ICOMOS, in partnership with the Ename Center in Belgium, will continue to discuss and refine it. The members of ICOMOS will be given opportunities for workshops and participation in the drafting of the final texts. At present, we foresee the adoption of a final text on interpretation at our general assembly in Quebec in 2008.

To conclude, we can summarize the intent of the Ename Charter as fourfold: one, to protect the physical integrity and authenticity of heritage sites; second, to ensure that all aspects of a site's significance are impartially made known to visitors; third, to prevent its significance from being used for propagandistic aims; and lastly, to ensure an ethical, professional approach to heritage interpretation. If these four principles were clear in our minds, we might not need the Ename Charter.

Gustavo Araoz, US/ICOMOS (U.S. National Committee of the International Council on Monuments and Sites), 401 F Street NW, Suite 331, Washington, D.C. 20001; garaoz@usicomos.org

## Economics and Authenticity: A Collision of Interpretations in Cane River National Heritage Area, Louisiana

David W. Morgan, Kevin C. MacDonald, and Fiona J. L. Handley

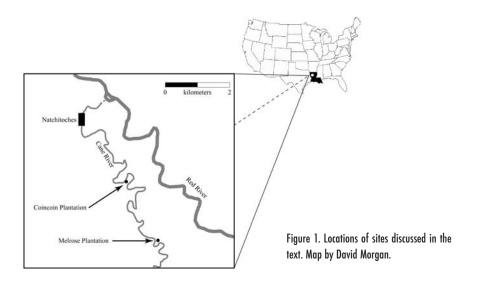
Ed. note: A version of this paper was originally presented at The Alliance of Natural Heritage Areas 2nd International Heritage Development Conference, Nashville, Tennessee, June 2005.

#### Introduction

Melrose Plantation, a United States national historic landmark, is a focal point for cultural tourism in northern and central Louisiana (Figure 1). It is celebrated as a pre-Louisiana Purchase property, for the origins of Melrose may go back as far as 1796. In that year, legend has it that a freed slave of African descent named Marie-Thérèse Coincoin acquired the land grant for this property on behalf of her son, Louis Metoyer, who was then still a slave (Mills and Mills 1973:33-59). Louis Metoyer was a Creole of Color, which in central Louisiana refers to a distinct group of people of mixed European, Native American, and African ancestry. Cane River is home to the descendents of this original colonial-era community, and the Cane River Creoles, as they call themselves, are a vibrant group of people who have experienced a strong cultural revitalization over the last decade. In the Cane River region, Marie-Thérèse herself is considered a founding figure of exceptional—almost mythic—importance, and most members of the Creole community trace their genealogical ties back to Marie-Thérèse and her ten children by the Frenchman, Jean Claude Thomas Pierre Metoyer. Marie-Thérèse's prominence in popular culture is due in no small part to the fact that their descendants became one of the South's wealthiest antebellum families of African descent (Louisiana State Museum 2003). Her more global importance has been highlighted recently by the attention given Cane River and Marie-Thérèse by Oprah Winfrey and two contemporary novelists (Tademy 2001; Mills 2003).

For the last four years we have worked at Melrose and the other plantations of Marie-Thérèse and her family as part of a collaborative archaeological and archival project between Northwestern State University of Louisiana (NSU) and University College London (UCL). During these years we have lived very much in the shadow of Coincoin's legend (for the story

of the Maison de Marie-Thérèse, see MacDonald, Morgan, and Handley 2002/2003; MacDonald, Morgan, and Handley, in press; MacDonald et al., in press). Little by little our research has unraveled the links between traditional narratives and certainties about the history of these properties, forcing us, as academics, to refine our understanding of the plantation's develop-



ment. This has thrust us into a position we did not anticipate, in which our findings are sometimes welcomed, but sometimes are seen as contesting, contradicting, or denying accepted narrative "truths."

There are three main parties who wish to stake a claim in the way in which Marie-Thérèse's story is told. One, obviously, are the individuals who self-identify as Cane River Creoles. A second party is the Association for the Preservation of Historic Natchitoches (APHN), a not-for-profit preservation group composed mostly of affluent Anglo women who currently incorporate Marie-Thérèse and Creole heritage into their interpretation of Melrose Plantation. Lastly, there are the outside academics, represented by us, as well as members of the National Park Service's Historic American Buildings Survey program and, over the years, an assortment of other social scientists.

In this paper we attempt to show how these three corporate voices come together to relate the tale of the Cane River Creoles. Sometimes the voices are harmonious,

sometimes they are discordant. As such our negotiations over the legend of Marie-Thérèse provide an interesting case study with which to illustrate the tenets of the third draft of the proposed Ename Charter for the Interpretation of Cultural Heritage Sites (see Silberman, this volume). Other similar charters have mentioned the need for sensitive, effective interpretation, but the Ename Charter, drafted under the auspices of ICOMOS, the International Council on Monuments and Sites, attempts to "define the basic objectives and principles of site interpretation in relation to authenticity, intellectual integrity, social responsibility, and respect for cultural significance and context" (ECPAHP 2005). It is particularly appropriate here, for it begins with the recognition that interpretation can be contentious and should acknowledge conflicting perspectives. As an international standard for all types of heritage sites, the charter is necessarily broad, but there are three principles that are especially appropriate to the case we present, because together they address the need for interpretation through scholarly methods and through living cultural traditions, the need for authenticity, and the need for fiscal sustainability.

#### **APHN's Melrose Narrative**

Melrose Plantation is the only publicly accessible cultural heritage site at which the history of Cane River Creoles is currently presented to the public. The APHN has owned the historic core of the plantation and acted as its steward for 34 years. The society's members obviously govern in a large measure how the tale of Marie-Thérèse and her family is interpreted there. Melrose, with its grand oaks and architecture, is certainly capable of attracting tourists for aesthetic reasons alone (Figure 2). The real marketing and advertising efforts of the APHN, however, are to convey Melrose as embodying the tale of three influential women: Marie-Thérèse Coincoin, Carmelite "Cammie" Henry, (the

Anglo owner responsible for Melrose's renaissance in the early twentieth century), and Clementine Hunter (the celebrated African-American artist who lived and worked at Melrose during the Cammie Henry era). The APHN's clear focus on strong-minded, independent women, two of whom were African American, is unusual, if not unique, in historic house interpretation in the southern U.S., and is an extremely important and valid interpretive approach.

The interpretive tour explaining these women's histories is based around five key "original" buildings. Three are of particular importance because they have been associated directly with the Marie-Thérèse legend:

• Yucca House. It is presented as being built around 1796, and legend has it that this was the original main house, built and lived in by Marie-Thérèse

Figure 2. Main house at Melrose Plantation. Photo by Jack Boucher, National Park Service, Historic American Buildings Survey.



(Figure 3).

- Africa House. It is also presented as being built around 1796 as a grain store, or, according to some accounts, a slave jail built in a Congolese style by Marie-Thérèse (Figure 4).
- Ghana House. A third supposedly original 1796 structure, this small cabin is reported to have been built in an architectural style reflecting Marie-Thérèse's African heritage (Figure 5).

The story of Marie-Thérèse is famous in Cane River country, and the APHN uses it to their advantage. For instance the Melrose Plantation tourist brochure (2002) proclaims, "The story of romantic Melrose Plantation begins with the legend of Marie Thérése Coincoin." It is accurate advertising, for so too does a visitor's trip to the plantation. Special tour groups are sometimes greeted by Betty Metoyer, a descendent of Marie-Thérèse. Metoyer typically awaits her tour groups from the upstairs porch of the main house, dressed in period

costume, and from her dramatic perch delivers the story of Marie-Thérèse and the plantation's founding; she then sweeps downstairs and across the lawn to commence the heart of the tour at Yucca and Africa houses.

As another example, the APHN website's main page leads visitors to two tourism sites, one of which is Melrose. Each heritage site is linked to a text blurb intended to draw a reader into a closer inspection, and Melrose's lure is telling:

"According to the tradition preserved by her descendants, Marie Therese Coincoin was the recipient of the grant of land known as Melrose Plantation."

The legend of Marie Therese Coincoin is not just the story of a woman but the story of a family grounded in African tradition, mellowed by French culture, this family developed in the briefest span of years into one of the unique societies in American history, a culture so distinct, so close-knit, that they have always termed themselves

Figure 3. Yucca House at Melrose Plantation. Photo by Jack Boucher, National Park Service, Historic American Buildings Survey.





Figure 4. Africa House at Melrose Plantation. Photo by Philip Gould, reproduced with his permission and courtesy of the Cane River National Heritage Area.



Figure 5. Ghana House at Melrose Plantation. Photo by Jack Boucher, National Park Service, Historic American Buildings Survey.

"The People." According to legend, it was here that the story began ....

By choosing and italicizing a quotation from the author François Mignon, whom we discuss below, and invoking the word "legend" twice in their explanatory text, the APHN brochure exploits the allure of the Marie-Thérèse mythos, while attempting to reinforce it using documented history. But, how academically reliable are the accounts they have chosen to use?

#### APHN and Melrose's link to Marie-Thérèse

Much of the legend of Marie-Thérèse told by the APHN at Melrose grew from Cammie Henry and the artists' colony that she created around her in the early 1900s (Figure 6). It was one of the members of the Henry community, the self-styled Frenchman François Mignon (Figure 7), who did the most to embroider and popularize the tale of Marie-Thérèse, first as writer of a regionally syndicated column, "The Cane River Memo" (1961-1963) and then as author of a book on the topic (1972). He invented the name Yucca for the earliest plantation at the property, a name also applied to what is supposedly the original plantation home, and claimed that Marie-Thérèse, a free slave from the Congo, owned Yucca plantation from 1743 onwards and built Yucca and Africa House in 1750 (Mignon 1972:1-2). Mignon (1972: 1-2) stated that Louis Metoyer inherited Yucca from his mother, and that Louis' son built the main house in 1833, at which point Yucca House was turned into a home "for indigent slaves." Mignon (1972:5, 30-31) also claimed that the two-story Africa House was "a replica of tribal houses on the Congo river in Africa" and that it

served simultaneously as both a jail for Coincoin's recalcitrant slaves and as a store-room.

Local folk historian Louis Nardini scornfully disputed Mignon's claims that same year. Nardini (1972) asserted that Coincoin never owned Melrose; did not build Yucca, Africa, or Ghana houses; and lived in her own plantation at Cedar Bend until at least 1816. That her son alone was involved with the construction of Yucca—and much later than had previously been believed—became a point of heated debate, particularly as the dialogue took place in the pages of the local newspaper.

Figure 6. Folklorist Lyle Saxon and Cammie Henry at Melrose Plantation. Cammie G. Henry Research Center Collections, Lyle Saxon Album, #014pl., Northwestern State University, Louisiana.



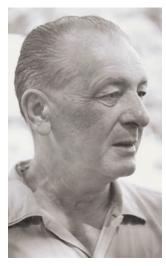


Figure 7. François Mignon. Cammie G. Henry Research Center Collections, Mignon Collection, #105-22, Northwestern State University, Louisiana.

The next year, amid growing controversy, the APHN hired the historians Gary Mills and Elizabeth Mills to write a proper account of the origins of Melrose plantation (1973). It later developed into the book The Forgotten People (Mills 1977) that now defines the conventional story of Melrose's origins. The Mills, with solid archival evidence, laid aside Mignon's claim for the 1750 establishment of the plantation. They focused instead on a Melrose property dispute that raged in 1806-1807. Louis Metoyer, Marie-Thérèse's son, filed claim to what is now Melrose in 1806. Sylvestre Bossier, the original 1789 grantee, contested the claim. Louis Metoyer rebutted that Bossier's right to the land had lapsed, since he had not made the required land improvements, and that the land had then been deeded to him in 1796. Louis ultimately won. In hindsight the Mills saw one flaw in Louis Metoyer's story: he was legally a slave until May 1802, and slaves could not be deeded land. To bridge this logical gap, the Mills (1973:41) echoed Mignon by asserting that Marie-Thérèse acquired the land in 1796 for her son and settled in Yucca House as the plantation matriarch.

#### Cane River Creoles and Melrose's link to Marie-Thérèse

The story is intriguing, and relatively uncomplicated, when told from only the APHN's perspective. The issue of telling the Marie-Thérèse tale at Melrose gets more complex when one listens to the second voice: that of the Cane River Creoles themselves. For many years the Creoles on Cane River were aware of the narrative related at Melrose, but were content to shrug it off as "somebody else trying to tell what we already know" (J. Colson, director, Creole Heritage Center, personal communication, 17 May 2005). As the Cane River Creoles became more invested in revitalization, they began to ask questions. Why should the largely Anglo members of the APHN tell their version of our story for the benefit of their organization? More to the point, why are they telling our story inaccurately? That query was the most problematic, for most Creoles believe that Marie-Thérèse was not as firmly connected to Melrose as the APHN claims. The Creoles, moreover, knew exactly where on the landscape Marie-Thérèse's story should be situated: a private residence several miles upriver.

According to the Cane River Creoles, what remains of Marie-Thérèse's home is a pink-painted, cypress-clad residence on a piece of property encompassing a portion of the 68-acre land grant given to Marie-Thérèse in 1786, when her long-term relationship with Jean Claude Thomas Pierre Metoyer ended (Figure 8). For many years it was generally accepted by the Creoles that the extant house on this property (known as the Coincoin-Prudhomme House) was the



Figure 8. The Coincoin-Prudhomme House on the Whittington Archaeological Site (16NA591). Photo by David Morgan.

original and only dwelling associated with Marie-Thérèse (Shaw 1983:6). This claim actually had more documentary backing than the Mills' Melrose claim, as there is a tax map of 1794 that depicts the "maison de Marie-Thérèse negresse libre," which is shown as occupying almost the exact spot as the standing structure. On the basis of the map and the discovery of 1700s French pottery in the home owner's flowerbed, the structure was placed on the National Register as the home of Marie-Thérèse and subsequently featured in African American Historic Places (Savage 1994).

As far as the Creoles were concerned, the location of Marie-Thérèse's home was known to them, it was not Melrose, and the debate thus centered on issues of cultural appropriation. Who has the right to tell this story? They also began turning their attention to the dilemma of using this house—well-known among the Creoles—as a vehi-

cle for reclaiming the Marie-Thérèse story. One possible solution a member of the Creole community broached with us was to possibly rehabilitate the structure into a bed and breakfast into which a museum display could be incorporated.

#### The academic voice on Melrose

At this point let us introduce the third perspective on Creole heritage sites: the academics'. Since 2001 we have actively been re-examining the archival documents, oral traditions, and material culture at Melrose Plantation and the Coincoin-Prudhomme property in hopes of learning about the material culture process of creolization. Our work has particularly sought to elucidate the role Africans and Native Americans played in the development of Cane River during the colonial and antebellum periods.

Turning first to Melrose, we found the

claims of APHN to be overstated, to say the least. The Millses' hypothesis that Marie-Thérèse founded and managed the plantation at Yucca House did not make much logical sense since Bossier's challenge to the land claim would have been directed at Marie-Thérèse, not her enslaved son, and the specter of Louis' legal rights as a slave would never have been raised. Thus the association of Marie-Thérèse with Melrose is founded upon gaps in the documentary record, rather than any actual written proof of her presence. Furthermore, as Nardini (1972) already indicated, the documents that do exist place Marie-Thérèse on her own plantation in 1816.

Other academics found little veracity in the supporting myth that Ghana House and Africa House are examples of architecture inspired by Marie-Thérèse's African experience. For one thing, it is uncertain whether Marie-Thérèse was born in Louisiana or Africa. For another, the African influence on the houses is a notion that does not hold up under close scrutiny. Ghana House is a simple log cabin, like many others along Cane River in the nineteenth century, and several local informants have told us that it was re-located from another property along the river by Cammie Henry in the 1920s. More attention has been given to Africa House. In a recent study of Creole building practice, Edwards (2002:66) argues persuasively that "nothing about this building can be directly related to African tradition. The builders of Africa House employed no customary African methods or design principles, but rather those of France." He goes on to supply illustrations of French farm structures closely resembling Africa House (see Figure 44 in Edwards 2002).

Our initial findings and Edwards'

architectural conclusions cast doubt on many of the "factual" constructs placing Marie-Thérèse at Melrose as its matriarch. The archaeology we subsequently conducted in tandem with our documentary work shed further light on the plantation's enigmatic founding at Yucca House. Without going into the details, which are published elsewhere (MacDonald et al., in press), a circa 1810 or later initial occupation date for Yucca House seems reasonable based on the associated material culture. Louis could not have built this structure in 1796. As if this were not enough, the artifacts are supported by three recently discovered survey documents held in the Louisiana State Land Office (MacDonald et al., in press). These three show, without doubt, that Louis' dwelling in 1814 was not Yucca House, and it is probable that Yucca House had not yet even been built, as it is unmarked and unreferenced on these maps. Indeed, Louis' residence, which was used as a reference mark, was not even on the same side of the river as Yucca House is

It is apparent that François Mignon, the local writer-in-residence at Melrose in the mid-1900s, created the backbone of the increasingly dubious Melrose legend. The irony is that Mignon's biggest myth was in fact himself. Rather than being French, as he intimated, Mignon was actually born in Cortland, New York, as Frank VerNooy Mineah (Cammie G. Henry Research Center 2004). Mineah, a long-term guest of Cammie Henry's at the plantation, invented Melrose as the point of origin for Creole culture by associating it with the story of Marie-Thérèse. Thus, by rewriting local history Mignon secured both the importance of his adopted home and made himself the indispensable gatekeeper of knowledge about the Creoles and Melrose (Figure 9). In short, Marie-Thérèse has become firmly associated with the story of Melrose Plantation's origins on the basis of no positive evidence and in the face of a significant amount of contrary evidence (MacDonald, Morgan, and Handley 2002/2003; MacDonald et al., in press).

#### The academic voice on the Coincoin-Prudhomme House

After exploring Melrose, we turned our attention to the oral tradition of the Cane River Creoles, hoping it could lead us to the place where Marie-Thérèse lived her life. The Cane River Creoles really did not object to our findings at Melrose, because it strengthened their own convictions. This time, however, our archaeology was on ancestral turf, and by searching for trash deposits and slave homes at the Whitting-

ton site (16NA591) we again unwittingly entered into a debate on authenticity, especially regarding the Coincoin-Prudhomme House that the archaeological site surrounds. Conventional wisdom about the Coincoin-Prudhomme House's tie to the Creole ancestress was academically challenged for the first time immediately prior to our initial fieldwork in 2001, when work by the Historic American Buildings Survey (HABS) of the National Park Service cast doubt on the age of the standing structure. The HABS team dated this Creole cottage to no earlier than the 1830s on the basis of nail chronology and a few stylistic features (National Park Service 2001).

Details of our work are published elsewhere (MacDonald, Morgan, and Handley 2002/2003; MacDonald et al., in press), so suffice it to say that copious earth moving on our part and re-inspection of excavations

Figure 9. François Mignon in Yucca House at Melrose Plantation. Cammie G. Henry Research Center Collections, Mignon Collection, #105-21, Northwestern State University, Louisiana.



from the 1970s failed to yield artifacts associated with the late 1700s or even the first decade or two of the 1800s, Marie-Thérèse's intensive plantation period, when she accumulated some 16 slaves. We ultimately began from scratch, georeferenced the original 1794 map, and discovered that the extant house's location and the location of the *maison* shown on the map were off by about 50 m. We redirected our investigations and, sure enough, some 50 m away, we found a cluster of artifacts typical of the late 1700s, as well as sub-surface features: the missing *maison de Marie-Thérèse*.

Stepping back, it was apparent that our work and HABS's severed the myth of Marie-Thérèse from the Coincoin-Prudhomme House, placing the latter firmly in the mid-1800s and associating it with a different family line entirely. That we went on to locate the vicinity where Marie-Thérèse's house actually stood probably was not much of a sop to the Cane River Creoles. Before our work they had something to look at, something to fire the imagination. We left them with an empty hay field owned, no less, by a non-Creole family.

#### Melrose and the draft Ename Charter

Let us move now from the concrete to the more abstract in order to examine how this case study reflects key aspects of the draft Ename Charter. A core theme of the charter's provisions is how to ensure the authenticity of interpretation, when nationalism, economics, power dynamics, authority roles, and competing epistemologies all determine what we perceive and interpret as "true" and "accurate," a conundrum discussed in many of the academic disciplines comprising heritage resource management (e.g., Shanks and Tilley 1987; Greenfield

1989; Handler 1991; Greaves 1994; Díaz-Andreu and Champion 1996; Posey and Dutfield 1996; Haley and Wilcoxon 1997; Ziff and Rao 1997; Messenger 1999; Warren 1999; Whiteley 2002). In this case, we think our years of academic archival and archaeological investigations embrace the first component of Principle 2, which states interpretation should be "based on systematic and well-researched evidence gathered through accepted scientific methods." But what about the second component, which insists that evidence also should come from "traditional sources of living cultures"? The Millses' archival work overwrote in many respects the myths Mignon created from traditional stories and, presumably, a healthy dollop of his own imagination. But, are our findings also not a partial refutation of the knowledge carried by members of the Cane River Creole community and the APHN? We outside academics advocate that Melrose's development be reconsidered in light of our "expert" findings, along with the identity of the Coincoin-Prudhomme House, and that the interpretations of these properties be revised accordingly. Should our claims trump those of the Cane River Creoles or the APHN?

Turning from the academics' view to look at authenticity in another fashion, the Creoles assert that the APHN is picking and choosing select aspects of the Marie-Thérèse story to suit their own purposes, and thus tell an inauthentic story even as they appropriate it. Marie-Thérèse is referred to in the standard tour as an example of Melrose's female residents, even as a strong, independent African American woman, but not as the founder of what is an active, thriving Creole community. In a tour given in May 2005 by a member of the APHN, a Creole woman from Natchitoches

was rather dismayed to hear twice on the tour that the Cane River Creoles had been "wiped out by Jim Crow" (Michelle Pichon, personal communication, 17 May 2005). Will APHN's tale be the accepted one, simply because it is repeated to the greatest number of people, far more than the numbers that make up the Creole community or who will thumb through academic books and journals?

Rather than enter discussions of who has the right to speak for whom, whose epistemology has greatest validity, and whether one historic narrative is more important than any other, the Ename Charter measures claims of legitimacy against the definition of "authenticity" the United Nations considered in its 1994 Nara Document. This definition recognizes that value judgments on cultural properties, as well as the credibility of pertinent information sources related to them, differ crossculturally and sometimes intra-culturally, making it impossible to establish fixed criteria of legitimacy. Instead, heritage sites must be considered and judged within their own contexts. This is the tautology of relativism, apparently broken by the requirement of inclusivity woven through both the Nara and Ename documents. Alternate views must be heard, or, in the language of Principle 6 of the charter: "Interpretation of cultural heritage sites must actively involve the participation of all stakeholders and associated communities," who must contribute to the planning process of the interpretive program and receive its benefits.

At this point it bears mentioning that we are in the enviable position where our academic information contests aspects of the APHN and the Cane River Creole's information, while relations between these three corporate groups—Creoles, outside

academics, and the APHN-remain remarkably cordial considering the emotional and economic issues at stake. We have, for instance, worked closely with the APHN and the Louisiana Creole Heritage Center, an outreach and research unit housed at Northwestern State University of Louisiana, as well as with many individual representatives of the Creole heritage revitalization effort. Part of the reason for the amiability is that all of the parties involved share, at some level, a fundamental grounding in Western epistemologies, so the problematic fixed criteria of legitimacy discussed in the Ename Charter is less an issue here than in some other cultural contexts. Unlike traditional stakeholders contesting interpretation at other sites, we do not face the dilemma where one person's body of proof simply does not exist as a conceptually valid measure of authenticity.

Accepting the value of the Creole traditional narrative as the Ename Charter advocates has not been difficult for those of us on the academic side of the table. We recognize the importance of oral tradition both for the sociohistorical data it contains and for its importance in the transmission of cultural values and knowledge, so the dialogue that develops from these personal interactions is akin to an information exchange between any set of researchers. The Creoles want to know what we have discovered that they either did not know, or to which they can contribute a personal or familial perspective. We want to know what personal or familial links we either will never find in the archival or archaeological records or will simply have overlooked because of our own cultural or methodological blinders. We are not in opposition because our work does not diminish the importance of their past or present, and

indeed only serves to highlight them in professional, national forums. As part of their desire to no longer be lost between the color lines, "the forgotten people" of America, as they are sometimes described (Mills 1977; Sarpy interview in Rodman 2005), seek knowledge and information about their past from whatever quarter it may derive, be it oral tradition or empirical testing.

Accommodating and presenting the traditional or academic narratives may not be quite as straightforward from the APHN perspective. By linking the Creoles to Marie-Thérèse and by linking Marie-Thérèse to Melrose, the Creoles' heritage has become pivotal to the economic success of the heritage site and the area at large, a concept addressed by the Ename Charter's fifth principle on economic sustainability. Central Louisiana is characterized by poverty, geographic isolation, and low taxation capacity. Heritage tourism is one of the few local industries that exists outside of lumber and agriculture. In a region with poverty levels nearly three times greater than the national average and with a median household income less than half that of the national average (Sims 2005:4), the ability of heritage tourism to generate tax dollars from outside visitors cannot be overstated.

A survey in 2003 of 399 heritage tourists in the Cane River National Heritage Area, which encompasses Melrose, indicated that 65% of the visitors to this area came from out of state and 4% were international visitors (Stynes and Sun 2004:5, Table 2). Of the 399 visitors, 74% of them stayed an average of 2.4 nights in the area (Stynes and Sun 2004:6, Table 3). This last figure is especially important, because Michigan State University researchers calculate that while the average day-trip travel party spends about \$100 on admissions, travel

costs, meals, and shopping, the average overnight travel party brings \$217 to \$466 dollars to the area, depending on whether or not they stay overnight in a hotel or a bed and breakfast (Stynes and Sun 2004:9, Table 13). Melrose is one of the major cultural tourism sites within the National Heritage Area and central Louisiana. Of these 399 sampled visitors, for instance, Melrose was the heritage site visited by the greatest number of people and was the heritage site of which visitors rated themselves most aware (Figures 10 and 11) (Stynes and Sun 2004:8, and Figure 2 therein). To put this in more concrete terms, last year Melrose brought to the parish 13,564 visitors, not counting those who attended various festivals and the annual Tour of Homes (Iris Harper, Natchitoches Tourist Commission, personal communication, 6 May 2005). At \$7 per adult and \$4 per child, these tourists represent a significant income stream for the APHN and a hefty contribution to the parish's tax base. For example, in 2003 and 2004 Melrose brought in from admission fees an average of \$81,687, and visitors in the first four months of 2005 brought in \$32,028, an increase of 173% over the amount brought in on average from January to April in the prior two years (Sue Weaver, executive director, APHN, personal communication, 2 June 2005). Losing one of the three women who form the narrative sequence at Melrose could diminish the heritage site's appeal to many tourists, hence creating a significant economic impact and threatening Melrose's long-term sustainability.

Melrose is a contested location for more than economic reasons. What makes this particular situation unusual is that, although we academics have shed considerable doubt on the validity of the traditional

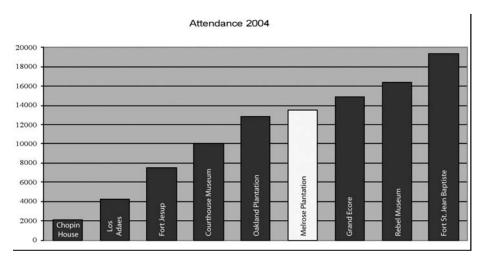


Figure 10. Visitor attendance at heritage tourism sites in Natchitoches Parish, 2004 (adapted from Figure 2 in Stynes and Sun 2004, 8).

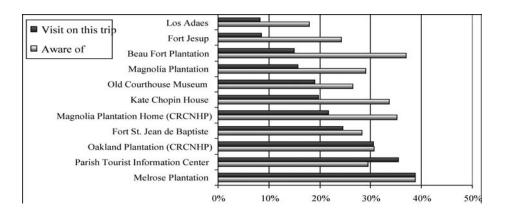


Figure 11. Visitor attendance at and awareness of Melrose Plantation (adapted from Figure 2 in Stynes and Sun 2004, 8).

Marie-Thérèse myth, and although the Creoles have their own origin location, Melrose remains the only place where the historically documented story of Marie-Thérèse can be told in an original historic setting or landscape (Martin, n.d.:44)—an important interpretive link recognized by Ename Charter's third principle. No other structures associated with her life, however remotely, still stand. So, what happens once

the link between the Creole progenitor and Melrose is pried apart by archival and archaeological evidence, or when the owner of the Coincoin-Prudhomme House succeeds in his plans to develop a combination museum/bed and breakfast?

The tenets of the Ename Charter would direct us to continue telling the Creoles' story at Melrose, for the Creoles are primary components of the social context in

which Melrose developed and operated. It is simply impossible to comprehend what Melrose represents without their story and, according to the charter, their direct input on its interpretation. The point may be moot, because Louis will become the vehicle by which his mother's tale is told, and Louis and Melrose will come to symbolize the prosperity of Marie-Thérèse's descendents; however, for this to happen the APHN would have to recognize the voices of Creole oral tradition and academic archival and archaeological research. The Coincoin-Prudhomme property, if ever developed into a private commercial venture, could serve as a visitor center for the (archaeological) Marie-Thérèse home site next door and be marketed in concert with Melrose, so that the two complement each other and add yet another dimension to a visitor's experience.

Collaborative input on the part of the stakeholders is in fact the avenue of resolution currently being negotiated between these various voices we have described. For instance, the negotiation of a mutually satisfactory narrative is still in progress. The Tour of Homes Committee has asked for assistance in telling the "alternate" history the Creoles prefer (J. Colson, director, Creole Heritage Center, personal communication, 17 May 2005), and the Creole Heritage Center currently is creating a traveling exhibit on the formation of the Cane River Creole community that will debut in October 2005 at Melrose during the Tour of Homes. The exhibit will explain the history of the Metoyer family and their kin (J. Colson, director, Creole Heritage Center, personal communication, 17 May 2005). Brochures will supplement the exhibit and will be distributed to visitors at Melrose after the exhibit has moved elsewhere. The APHN thus is not deprived of one of the three women around whose lives their interpretive tours center, and has the added incentive of being able to deliver a more robust, authentic narrative to the public.

Once the APHN and the Creoles agree on the manner in which the Marie-Thérèse narrative is presented, cultural appropriation issues will lose much of their potency. Melrose, with its imposing main house, would come to serve the Creoles as an important symbol of the Metoyer family's wealth, as is evidenced by its use as a backdrop in this context in a 2005 documentary on Cane River Creoles aired on Louisiana Public Broadcasting (Rodman 2005). Viewed in the context of Melrose plantation, it is easy to argue that America's "forgotten people" once were a very successful, prosperous part of the American past.

Meanwhile, the Cane River National Heritage Area has identified Cane River Creole culture as one of their primary interpretive themes. Their interpretive plan urges that more research be conducted focusing on the links between Marie-Thérèse and Melrose, but that her story should continue to be told at the plantation in recognition of her importance to visitors and the local community (Martin n.d.:44). More broadly, the challenges faced by the APHN, like other heritage organizations, are in developing well-researched interpretative themes and delivering them through welltrained guides and up-to-date presentations, while operating within a tight budget and dealing with on-going conservation issues. In this sense, persuading the APHN to accept historic information from both stakeholders and academics as valuable contributions to Melrose's interpretation is easy; it is much harder to see a clear way through the remolding of the interpretation

of the site, from advertising pamphlets to retraining guides, especially when the status quo of the site operates well from a financial point of view.

What this discussion reiterates however, is that the Cane River has a rich resource of material and social history to draw upon in developing heritage tourism. Eventually, the stories of Marie-Thérèse as an influential African American woman, and as the head of the Cane River Creoles, could be told. The more variety there is in interpreting these histories, whether through changing presentations at Melrose to encourage repeat local visits, or even through developing new audience attractions aimed at the overnight visitor market, the more it will not only add to the nuances of the stories told, but also alleviate the pressure on one location to present the definitive history.

As far as we academics are concerned, the process by which these different competing narratives formed, the myths they generated, and the way they became integrated into something deemed authentic

becomes yet another element of the story. We would like to think that we were able to learn something about the structures, their history, and their inhabitants that added greater depth and texture to the narratives told by both competing voices, and thus profited the APHN, Cane River Creoles, and the public at large. Even if we revealed more questions than answers, or threatened the interpretive status quo, perhaps our worth is measurable by the motion our inquiries are beginning to lend to an otherwise static interpretation. When it comes to the many daily interpretive tours at Melrose, or general conversations within the local community, how our voice ultimately is interpreted and incorporated ironically will be under the control of those who have perpetuated Mignon's legends. Through the Ename Charter, it may be possible for all stakeholders to use and reinvent competing Cane River Creole histories in a way that fosters economically viable, informative, and balanced interpretations of valuable heritage resources.

#### References

- Allen, Barbara. 2003. Reconstituting the vanished: Gender, memory, and placemaking in the Delta South. *Architronic* 5:1.02. On-line at http://architronic.saed.kent.edu/v5n1.02a.html.
- Cammie G. Henry Research Center. 2004. Northwestern State University Library's "Francois Mignon Collection Biographical Sketch." On-line at www.nsula.edu/watson\_library/cghrc\_core/mignon.htm. Accessed 15 February 2004.
- Cane River National Heritage Area Commission. 2003. Cane River National Heritage Area Management Plan. Denver: National Park Service, Denver Service Center.
- Díaz-Andreu, Margarita, and Timothy Champion, eds. 1996. *Nationalism and Archaeology in Europe*. Boulder, Colo.: Westview Pres.
- ECPAHP [Ename Center for Public Archaeology and Heritage Presentation]. 2005. ICOMOS Ename Charter for the Interpretation of Cultural Heritage Sites: Third draft, 8/23/04. Unpublished draft. On-line at www.enamecharter.org.
- Edwards, Jay D. 2002. Vernacular vision: The Gallery and our Africanized architectural landscape. In *Raised to the Trade: Creole Building Arts of New Orleans*. J.E. Hankins and S. Maklansky, eds. New Orleans: New Orleans Museum of Art, 61–94.

- Greaves, Tom, ed. 1994. Intellectual Property Rights for Indigenous Peoples: A Sourcebook.
  Oklahoma City: Society for Applied Anthropology.
- Greenfield, Jeanette. 1989. *The Return of Cultural Treasures*. Cambridge, U.K.: Cambridge University Press.
- Haley, Brian D., and Larry R. Wilcoxon. 1997. Anthropology and the making of Chumash tradition. *Current Anthropology* 38:5, 761–777.
- Handler, Richard. 1991. Who owns the past? History, cultural property, and the logic of possessive individualism. In *The Politics of Culture*. B. Williams, ed. Washington, D.C.: Smithsonian Institution Press, 63–74.
- Louisiana Department of Culture, Recreation, and Tourism. N.d. Louisiana: Our culture abounds. Baton Rouge: Louisiana Department of Culture, Recreation, and Tourism.
- Louisiana State Museum. 2003. The Cabildo—Antebellum Louisiana: Agrarian life. Louisiana State Museum on-line exhibits.
- MacDonald, Kevin C., David W. Morgan, and Fiona J.L. Handley. 2002/2003. Cane River: The archaeology of "free people of color" in colonial Louisiana. *Archaeology International* 6, 52–55.
- ——. In press. The Cane River African Diaspora Archaeological Project: Prospectus and initial results. In *African Re-Genesis: Confronting Social Issues in the Diaspora*. J. Haviser and K.C. MacDonald, eds. London: University College London Press.
- MacDonald, Kevin C., David W. Morgan, Fiona J.L. Handley, Emma Morley and Aubra Lee. In press. The archaeology of local myths and heritage tourism: The case of Cane River's Melrose Plantation. In [title and editors withheld due to upcoming publication as a Festschrift volume]. London: University College London Press.
- Martin, Brenden. N.d. Cane River National Heritage Area Master Interpretive Plan. Report prepared for the Cane River National Heritage Area, Natchitoches, Louisiana.
- Messenger, Phyllis Mauch, ed. 1999. The Ethics of Collecting Cultural Property: Whose Culture? Whose Property? 2nd ed. Albuquerque: University of New Mexico Press.
- Mignon, François. 1972. Plantation Memo: Plantation Life in Louisiana 1750–1970 and Other Matters. Baton Rouge: Claitor's Publishing Division.
- Mills, Elizabeth S. 2003. Isle of Canes. N.p.: MyFamily.com, Inc.
- Mills, Gary B. 1977. The Forgotten People: Cane River's Creoles of Color. Louisiana State University Press, Baton Rouge.
- Mills, Gary B., and Elizabeth S. Mills. 1973. *Melrose*. Natchitoches, La.: The Association for the Preservation of Historic Natchitoches.
- Morgan, David W., and Kevin C. MacDonald. 2003. Refining our view of the Creole land-scape: Using archaeology to locate the house of Marie-Thérèse Coincoin. Paper presented at the Creole Studies Conference, New Orleans.
- Nardini, Louis R., Sr. 1972. 'Legends' about Marie Therese disputed. In *Natchitoches* (Louisiana) *Times*, n.d., 8-A.
- National Park Service. 2001. Historic American Buildings Survey LA-1295: Coincoin-Prudhomme House (Maison de Marie Therese) (draft copy). Unpublished report on file at Cane River National Heritage Area, Natchitoches, Louisiana.
- Posey, Darrell A., and Graham Dutfield. 1996. Beyond Intellectual Property: Toward

- Traditional Resource Rights for Indigenous Peoples and Local Communities. Ottawa, Ont.: International Development Research Centre.
- Rodman, Bill. 2005. *Cane River Creoles: The Spirit of a Culture*. F.R. Ulmer, gen. ed. DVD production funded by the Cane River National Heritage Area, the Louisiana Endowment for the Humanities, and the Louisiana Division of the Arts.
- Savage, Beth L. 1994. African American Historic Places. New York: The Preservation Press. Shanks, Michael, and Christopher Tilley. 1987. Social Theory and Archaeology. Cambridge, Mass.: Polity Press.
- Shaw, Billy Wayne. 1983. A ceramic chronology for the Whittington House site: 1780–present. Master's thesis, Northwestern State University, Natchitoches, Louisiana.
- Sims, Jan. 2005. Northwestern State University's 2005 grant application for the Title III, Part A, Strengthening Institutions Programs of the United States Department of Education. Unpublished manuscript on file with the Office of Research and Sponsored Programs, Northwestern State University, Natchitoches, Louisiana.
- Stynes, Daniel J. and Ya-Yen Sun. 2004. Cane River National Heritage Area: Visitor Characteristics and Economic Impacts. Report prepared for the Cane River National Heritage Area, Natchitoches, Louisiana. On-line at www.prr.msu.edu/mgm2/default.htm.
- Tademy, Lalita. 2001. Cane River. New York: Warner Books.
- Warren, Karen J. 1999. A philosophical perspective on the ethics and resolution of cultural property issues. In *The Ethics of Collecting Cultural Property: Whose Culture? Whose Property?* 2nd ed. Phyllis Mauch Messenger, ed. Albuquerque: University of New Mexico Press, 1–25.
- Whiteley, Peter M. 2002. Archaeology and oral tradition: The scientific importance of dialogue. *American Antiquity* 67:3, 405–415.
- Ziff, Bruce H., and Pratima V. Rao, eds. 1997. Borrowed Power: Essays on Cultural Appropriation. New Brunswick, N.J.: Rutgers University Press.
- **David W. Morgan,** National Center for Preservation Technology and Training, 645 University Parkway, Natchitoches, Louisiana 71457; david\_morgan@nps.gov
- Kevin C. MacDonald, Institute of Archaeology, University College London, 31–34 Gordon Square, London WC1H 0PY United Kingdom; Kevin.MacDonald@ucl.ac.uk
- Fiona J. L. Handley, Winchester School of Art, University of Southampton, Park Avenue, Winchester SO23 8DL United Kingdom; fjlh100@hotmail.com

#### **ADDENDUM**

[Ed. note: In April 2008 the co-authors requested that the following addendum, which clarifies some of the key conclusions of the article based on new evidence, be appended to the online (PDF) edition. The addendum was accepted and posted in May 2008.]

Since writing both this article and a chapter which appeared in the edited volume A Future for the Past, we have entered into correspondence with Elizabeth Shown Mills of Samford University Institute of Genealogy and Historical Research, and the widow of the late historian, Gary B. Mills. Through this correspondence we have learned that our assertions concerning her and G.B. Mills's conclusions regarding the involvement of Marie-Thérèse Coincoin with the foundation of Melrose do not represent the views expressed in their more recent publications on the subject (cf. Mills and Mills 1982:177; G.B. Mills 1984:101; E.S. Mills, in press). Indeed, we have been informed by Elizabeth Mills that their original Melrose booklet, which remains in use at the heritage property and from which our assertions were principally derived, had in fact been nuanced by the property's proprietors—without the authors' consent—in order to reflect a stronger link between Marie-Thérèse Coincoin and that property (E.S. Mills, pers. comm., 13 December 2007). We (the co-authors) request that this addendum be published to make clear that our own views and the published views of Elizabeth Mills concerning the relationship of Marie-Thérèse Coincoin and the Melrose property are in fact largely in agreement, and that it was not our intention to in any way to diminish the outstanding scholarly reputation of E.S. Mills and the late G.B. Mills, for whom we have the greatest respect.

#### References

Mills, Elizabeth S. In press. Marie Thérèze Coincoin (1742–1816): Black Creole touchstone and paradox. In *Louisiana Women*. Athens: University of Georgia Press.

Mills, Elizabeth S., and Gary B. Mills. 1982. Slaves and masters: The Louisiana Metoyers. *National Genealogical Society Quarterly* 70:3, 163–189.

Mills, Gary B. 1984. Liberté, fraternité, and everything but égalitié: Cane River's Citoyens de Couleur. In *North Louisiana: Essays on the Region and Its History*, vol. 1. B.H. Gilley, ed. Ruston, La.: McGinty Trust Fund Publications, 93–112.

David W. Morgan Kevin C. MacDonald Fiona J. L. Handley

### Application of an Issue Evolution Model to Wildlife Issues in National Parks

Kirsten M. Leong, Daniel J. Decker, Margaret A. Wild, and John Karish

#### Introduction

THE OFTEN-QUOTED PURPOSE OF THE NATIONAL PARK SERVICE (NPS) is "to promote and regulate the use of ... national parks ... which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (National Park Service Act, 1916). Within the legally defined boundaries of a particular park, NPS resource managers face the challenge of simultaneously attending to both the conservation and public enjoyment of resources. Adding to this challenge, parks encounter many natural resource management issues, such as those related to wildlife, that are not limited by park boundaries. Among these, human-wildlife interactions can elicit strong positive and negative emotions in people. Park actions affecting wildlife can evoke equally strong and often disparate public reactions. These commonly evolve into public issues as managers deal with the practical aspects of responding to wildlife concerns that extend beyond park boundaries or involve controversial management practices that attract larger regional or national dialogue.

Because of the range and intensity of cognitions about wildlife extant in the American public (Bright, Manfredo, and Fulton 2000; Kellert 1996), wildlife management actions may become the focus of public controversy when any subset of stakeholders2 perceives a negative impact3 from a management intervention. This possibility has led many agencies to involve stakeholders more openly in wildlife management4 decision-making. Greater public involvement in controversial issues requires managers to apply their understanding of the social and political contexts for management in addition to their knowledge of wildlife biology and ecology. Understanding the sociopolitical factors that fuel the

progression of wildlife issues from vague concerns about human-wildlife interactions into full-blown public issues therefore is of practical value to the wildlife manager.

Policy analysts, public issues educators, and political scientists have long been interested in articulating the process whereby the spark of a concern becomes a fully engulfed public issue. Models have been developed to describe the evolution of public issues and help guide practitioners in issue resolution (Dale and Hahn 1994). Using the model promoted by Hahn (1988), we describe four stages in the evolution of public issues with respect to wildlife, adapted to address wildlife management in national parks (Figure 1).

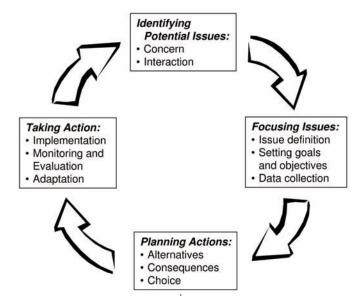


Figure 1. Issue evolution model in wildlife management (adapted from Hahn, 1988).

- Identifying potential issues. Concerns are voiced and activity from concerned individuals increases, although issues are not yet fully formed.
- Focusing issues. Issues are formally defined, goals and objectives set, and data collected (laying the groundwork for program evaluation).
- Planning action. Potential actions to address issues are identified based on data collected. These are evaluated with respect to variables such as efficacy, social acceptability, and cost.
- Taking action. Chosen management alternatives are implemented, evaluated, and adjusted. Activities may be refined as a result of evaluation through monitoring, as an adaptive management strategy.

This model reflects our understanding of emerging ideals of practice with respect to issues education. These ideals include early and frequent dialogue with the public (NPS 2000, 2003a; Wilsdon and Willis 2004), which may be adopted in practice to

varying degrees. In our treatment of the model, we separate NPS and the public to identify potential tension points between natural resource managers and stakeholders, as well as among stakeholders themselves. The four stages are not a prescriptive, step-by-step formula for decision-making, but rather serve as a general guide to help managers reflect on questions such as: Where are we in the public or political "life" of an issue? What steps are needed to reach good decisions about objectives or management actions? Is the outcome likely? How do we know whether we are making progress toward resolving the issue?

### Stages of wildlife issue evolution in national parks

**Identifying potential issues.** This stage is characterized by the emergence of voiced concerns and increased activity from stakeholders (Table 1).

**Focusing issues.** When issues develop to this stage, the nature of the issue typically is formally defined, goals and objectives are set for wildlife management, and data

#### CONCERN

Concerns surface about overabundance, scarcity, or behavior of wildlife in a park.

Recognition develops that concerns are not simply harbored by one or a few individuals.

#### NPS

#### Park managers or other employees begin to identify impacts associated with the presence / absence / behavior of wildlife on park management objectives. Concerns may emerge as topics of discussion among colleagues.

#### Public\*

Park visitors, members of gateway communities, scientists, other natural resource managers, special-interest groups, and/or other stakeholders begin to identify impacts from presence / absence / behavior of wildlife in a park. Concerns may be voiced informally to park employees.

\*We use "public" as a term of convenience to refer to a variety of stakeholders and affected interests, as well as the general public.

#### INTERACTION

Some people with concerns about wildlife seek support from one another and inform officials of their concerns. At this early stage, differing views about the nature of the concerns often are expressed and likely remedies are suggested. The potential for controversy becomes apparent. Interaction among individuals also leads to the realization that a quick fix does not exist and sets the stage for issue definition.

#### NPS

# Groups of natural resource managers, rangers, interpreters, or other park employees may meet to assess the extent and nature of their wildlife concerns; regional or Washington Office consultation may be sought. Consensus or differing views as to the nature and severity of concern may emerge among NPS employees.

#### Public

Park managers may start receiving official complaints from the public. Letters to the editor may appear in the local newspaper as the concern becomes increasingly "public." Inquiries may be received from congressional offices responding to constituent complaints. Grassroots interest groups may form. Established groups may show interest in the concerns expressed by some stakeholders.

Table 1. The "identifying potential issues" stage of the model.

are collected, laying groundwork for effective program evaluation. Ideally, park managers and stakeholders work together to discover areas of commonality and differences; input from non-vocal stakeholders is actively sought (Table 2).

Planning action. If research does not show negative impacts of wildlife on park management objectives, interpretive programs that explain the situation may be implemented to improve correlation between public perception and scientific analysis.

#### ISSUE DEFINITION

General agreement on issue definition forms among a critical mass of park managers and/or stakeholders, although each group may hold different opinions about the best way to proceed. The value of identifying common fundamental objectives to guide discussion, analysis, and decisions becomes evident. To continue towards possible action by the NPS, issues are defined in terms of impacts to park resources as described in enabling legislation, policy, or park planning documents.

NPS	Public
General agreement is sought among park	General agreement is sought within
representatives about the nature of the	various segments of the public about the
impacts of wildlife on park management	nature of wildlife impacts on their
objectives or the park's relationship with	community, visiting experience, or
stakeholders. NPS representatives help	personal interests. Through dialogue with
the public understand park priorities	the NPS, stakeholders determine whether
and federal planning processes.	their concerns fall under NPS jurisdiction.

#### SETTING GOALS AND OBJECTIVES

Specific management goals and objectives are defined, with an emphasis on understanding perspectives of the various stakeholder groups and identifying common purpose. Effective communication is critical to clearly understand the interests underlying stakeholder positions. Desired conditions are identified.

NPS	Public
Park managers articulate wildlife needs and interests in terms of park goals mandated in enabling legislation and defined in park planning documents (e.g., in relation to "desired conditions"). Park managers explain mandated processes and research needs to facilitate accomplishing necessary objectives.	Stakeholders articulate their needs and interests with respect to impacts of wildlife (e.g., through early planning sessions similar to public scoping activities).

# Biological and sociological data are collected to document whether and how wildlife significantly prevent the park from meeting management objectives. NPS Public Park staff, partners, and/or contractors typically conduct biological and sociological studies and analyze wildlife impacts with respect to defined objectives. The public is informed about data collection. Stakeholders and partners also may develop complementary studies in communities bordering the park.

Table 2. The "focusing issues" stage of the model.

If research reveals that wildlife is preventing the park from fulfilling management objectives, park managers likely begin internal dialogue and discuss potential alternatives with respect to applicable NPS policy. Initial, informal analysis of alternatives (as in developing resource stewardship plans) may reveal the need to consider more controversial alternatives that legally require formal stakeholder involvement processes in compliance with the National Environmental Policy Act (NEPA, 1969). Regardless of compliance requirements, at this stage managers and stakeholders typically discuss alternative actions and analyze consequences, with respect to both short- and long-term management goals and objectives. Park managers consider stakeholder input when selecting the preferred alternative for implementation. New alternatives may become apparent through discussion of consequences or evaluation of the different choices. Emphasis is placed on effective communication, public participation, and creative thinking (Table 3).

Taking action. This stage involves implementation, evaluation, and adaptation of the chosen management alternative(s). Evaluation is aided by clear goals and objectives. Activities may be refined as a result of progress evaluation, informed by data acquired through monitoring. Modifications or fine-tuning of management activities may occur as part of an adaptive management strategy (Table 4).

#### Extending the model

The stage-to-stage progression of public issues depicted in the model is an approximation of how many public issues evolve, but issue evolution often is not a linear process. In fact, recent application of the Hahn model to ten cases of suburban deer

management revealed that issues often progressed in a start-and-stop fashion, advancing but then reverting back to earlier stages of the cycle (Raik, Siemer, and Decker 2004). This phenomenon often is related to the disparity in knowledge and understanding of various stakeholders, a situation that may be overcome using strategic communication. For example, when natural resource managers and/or various stakeholder groups are not at the same phase of the cycle, communication between groups can improve alignment to assure that all parties understand the issue in the same way before progressing to the next phase. Improving stakeholder understanding, attitudes, and input at all phases of the cycle is a key activity in this approach. Yet, because the NPS ultimately is responsible for its natural resource management decisions, dialogue between managers and stakeholders technically is not required at all phases of issue evolution. Varying degrees of stakeholder involvement, perhaps especially in early stages, may partially explain why public wildlife issues do not always evolve in a linear fashion.

Under NEPA, NPS managers are required by law to include public input only when a park proposes or approves an action whose impacts on the human environment are significant enough to warrant an environmental impact statement (EIS); i.e., when the issues have reached the phase of "planning actions" (Figure 2). Reaching consensus or formal agreement with the public during action planning is not legally mandated, and courts have upheld NEPA as imposing only procedural requirements, preventing uninformed, rather than socially unacceptable, agency action (Robertson v. Methow Valley Citizens Council 1989). Operating strictly under this approach, the

#### ALTERNATIVES

Different actions to meet objectives are suggested and discussed within the framework of NPS policy guidelines. Discussion of alternatives may amplify public controversy and may be challenging for park managers. Clear goals and objectives are key in addressing alternatives.

NPS	Public
Park managers explain potential alternatives to stakeholders. Education and interpretation help the public understand the feasibility, appropriateness, and efficacy of alternatives.	Through informal and/or formal processes, stakeholders help evaluate different alternatives and offer additional solutions based on their own interests and needs.

#### CONSEQUENCES

Consequences of proposed actions are evaluated on criteria, including: environmental, cultural, and social impacts; effectiveness; costs and benefits; and trade-offs of each alternative. NPS and different stakeholders are likely to have different perspectives on costs and benefits.

NPS	Public
Park managers have an understanding of the biological, cultural, and sociological consequences of each alternative. Education and interpretation are important in helping the public understand costs and benefits of each alternative.	Stakeholders have an understanding of any management alternatives that might affect them or require their involvement. Stakeholders communicate concerns and help evaluate which alternatives are feasible to implement.

#### CHOICE

As park managers and stakeholders approach making a choice, they deliberate about which alternative(s) to adopt. New alternatives may be discovered in this process. Final decisions rest with the park managers, but chosen alternatives are more likely to meet with public support in the long run if stakeholder input is considered.

NPS	Public
Park managers are ultimately responsible	Stakeholders typically seek to make their
for the alternative(s) chosen for	interests known in the evaluation process.
implementation in the park, ideally	Land owners, local communities, or other
considering both stakeholder interests	public agencies may decide to undertake
and coordinated, complementary	management activities in areas bordering
management activities by partners	the park.
outside the park in the final decision.	***

Table 3. The "planning action" stage of the model.

IMPLEMENTATION	
Actions are taken as part of a wildlife manag	ement program.
NPS	Public
The NPS is responsible for implementation of management activities in the park and establishing a plan that includes periodic public notice of progress.	Stakeholders may decide to undertake complementary management activities in communities or on public lands bordering the park.
MONITORING AND EVALUATION	
The impacts of wildlife management actions vital component for assessing progress and ke	
NPS	Public
Park staff monitor and evaluate the effects of wildlife management actions throughout each iterative action in the program's implementation.	The public is kept informed throughout the monitoring and evaluation process.  Opportunities to include stakeholders in monitoring and evaluation are encouraged.
ADAPTATION	
Activities are modified based on the outcomes part of a formal adaptive management strate	
NPS	Public
Wildlife management actions are modified as necessary throughout the program's implementation based on the outcomes of evaluation.	Public input is included in any substantial subsequent decisions about modifying or even continuing the management program.

Table 4. The "taking action" stage of the model.

public is asked for input on alternative solutions to NPS-defined issues, goals, and data. Although managers may have addressed each of the earlier phases in depth through internal NPS scoping, there is no guarantee that members of the public have reached the same level of understanding of the issue, or share NPS perspectives about reasonable solutions. The Department of the Interior recently addressed this discrepancy by issuing requirements that interested community members be offered training in both community-based planning

and the NEPA process (U.S. Office of Environmental Policy 2003). Nevertheless, public input processes that meet NEPA's procedural requirements frequently have resulted in court challenges to EISs. Lawsuits may result in a return to early phases of the issue evolution cycle, requiring parks to reassess the nature of the problem and appropriate solutions, as in the case of deer management at Cuyahoga Valley National Park (NPS 2003b).

The federal government is placing greater emphasis on including stakeholders

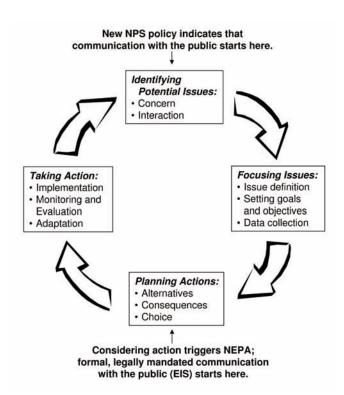


Figure 2. Policy implications for communication with respect to the issue evolution Model. "New policy" includes *Management Policies 2001* (NPS 2000) and *Director's Order #75A* (NPS 2003a).

in policy-making from the beginning of, and continuing throughout, the issue evolution cycle (Figure 2), a practice known as "upstream" public engagement (Wilsdon and Willis 2004). Recent NPS policies explicitly call for active, on-going public participation in the planning process (NPS 2000), re-emphasized in a Director's Order:

The purpose of this Director's Order (DO) is to articulate our commitment to civic engagement, and to have all National Park Service (NPS) units and offices embrace civic engagement as the essential foundation and framework for creating plans and developing programs.... This philosophy means that we do more than meet the minimum legal requirements for public involvement in our decisions and

activities. It means a regular, natural and sustained level of interaction with people, both from within and outside the NPS. This, in turn, will enhance our ability to achieve our mission, which is conserving park resources unimpaired for the enjoyment of present and future generations (NPS 2003a:1–2).

Engaging the public early on may help managers establish a common foundation for constructive discussion of alternatives when the planning phase is reached. Utilizing a model such as the one outlined above may assist thinking about complex wildlife issues by encouraging attention to each element in the issue evolution progression. Park managers who incorporate such thinking into their practice are likely to be

well poised to engage stakeholders in learning, deliberation, and, eventually, decision-making. Managers may find that educating stakeholders about wildlife issues and engaging them as part of the analysis of the

management situation, as well as during development of solutions, enhances public acceptance and effectiveness of wildlife management practices in NPS units.

#### **Acknowledgments**

We would like to thank staff of the National Park Service Biological Resource Management Division and Cornell University Department of Natural Resources for their review of drafts of this manuscript. The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. government.

#### **Endnotes**

- 1. An "issue" is a statement that can be acted upon (Kent and Preister 1999).
- 2. "Stakeholders" are individuals who will be affected by, or will affect, wildlife management (Decker et al. 1996; Decker, Brown, and Siemer 2001). NPS sometimes refers to people who meet this definition as "interested parties"; however, we use the term "stakeholder" as it is more widely applied in the natural resource management profession. The term "stakeholder" should not be confused with "special-interest group" or with only those people cognizant of their stake (especially in planning activities), as it is possible for someone who may be affected by wildlife management decisions and actions to be unaware of the consequences, or for someone who will not be directly affected by management decisions to show a genuine interest.
- 3. "Impacts" are the socially determined important effects of events or interactions involving wildlife, humans and wildlife, and wildlife management interventions, and are defined broadly in terms of human values with respect to wildlife (Riley et al. 2002). Perceptions of impacts also are affected by the context in which they occur, with social norms relevant to that context influencing the interpretation of events and interactions (Zinn et al. 1998; Decker, Jacobson, and Brown, in review).
- 4. We use the term "wildlife management" broadly to include planning, decision-making, and actions where wildlife is the primary focus of the management goal, and management of wildlife enables achievement of objectives for other resources. Management actions also may include interventions solely directed towards people to affect human-wildlife interactions.

#### References

- Bright, A.D., M.J. Manfredo, and D.C. Fulton. 2000. Segmenting the public: An application of value orientations to wildlife planning in Colorado. *Wildlife Society Bulletin* 28:1, 218–226.
- Dale, D.D., and Alan J. Hahn. 1994. *Public Issues Education: Increasing Competence in Resolving Public Issues*. Madison: University of Wisconsin–Extension.
- Decker, Daniel J., Tommy L. Brown, and William F. Siemer. 2001. *Human Dimensions of Wildlife Management in North America*. Bethesda, Md.: The Wildlife Society.
- Decker, Daniel J., Cynthia A. Jacobson, and Tommy L. Brown. In review. Situation specific 'impact dependency' as a determinant of acceptability of wildlife management: Insights

- from wolf and grizzly management in Alaska. Wildlife Society Bulletin.
- Decker, Daniel J., Charles C. Krueger, Richard A. Baer, Jr., Barbara A. Knuth, and Milo E. Richmond. 1996. From clients to stakeholders: A philosophical shift for fish and wild-life management. *Human Dimensions of Wildlife* 1:1, 70–82.
- Hahn, Alan J. 1988. Resolving Public Issues and Concerns through Policy Education. Raleigh: North Carolina Agricultural Extension Service.
- Kellert, Stephen R. 1996. The Value of Life: Biological Diversity and Human Society. Washington, D.C.: Island Press.
- Kent, James A., and Kevin Preister. 1999. *Methods for the Development of Human Geographic Boundaries and their Uses*. Report prepared under Cooperative Agreement no. 1422-P850-A8-0015 between James Kent Associates and the U.S. Department of the Interior, Bureau of Land Management, Task Order no. 001.
- NPS [National Park Service]. 2000. Management Policies 2001. Washington, D.C.: NPS.
- ——. 2003a. Director's Order #75A: Civic Engagement and Public Involvement. Washington, D.C.: NPS.
- ——. 2003b. *Final EIS—Rural Landscape Management Program*. Brecksville, Ohio: Cuyahoga Valley National Park.
- Raik, Daniela, William F. Siemer, and Daniel J. Decker. 2004. Community-based Suburban Deer Management: Six Case Studies of Issue Evolution, Capacity, and Intervention. Human Dimensions Research Unit Publication Series no. 04-1. Ithaca, N.Y.: Department of Natural Resources, College of Agriculture and Life Sciences, Cornell University.
- Riley, S. J., D.J. Decker, L.H. Carpenter, J.F. Organ, W.F. Siemer, G.F. Mattfeld, and G. Parsons. 2002. The essence of wildlife management. *Wildlife Society Bulletin* 30:2, 585–593.
- U.S. Office of Environmental Policy. 2003. PEP-Environmental Statement Memorandum no. ESM 03-4, Procedures for Implementing Public Participation and Community-based Training. Washington, D.C.: Department of the Interior.
- Wilsdon, James, and Rebecca Willis. 2004. See-through Science: Why Public Engagement Needs to Move Upstream. London: Demos.
- Zinn, H.C., M.J. Manfredo, J.J. Vaske, and K. Wittmann. 1998. Using normative beliefs to determine the acceptability of wildlife management actions. *Society and Natural Resources* 11:7, 649–662.
- **Kirsten M. Leong,** Human Dimensions Research Unit, Department of Natural Resources, Cornell University, Ithaca, New York 14853; kml47@cornell.edu
- Daniel J. Decker, Human Dimensions Research Unit, Department of Natural Resources, Cornell University, Ithaca, New York 14853; djd6@cornell.edu
- Margaret A. Wild, Biological Resource Management Division, Natural Resource Program Center, National Park Service, 1201 Oakridge Drive, Suite 200, Fort Collins, Colorado 80525; Margaret\_Wild@nps.gov
- John Karish, Northeast Regional Office, National Park Service, 209B Ferguson Building, University Park, Pennsylvania 16802; John\_Karish@nps.gov

# Adaptive Management of National Park Ecosystems

# Tony Prato

MANAGEMENT OF NATIONAL PARK ECOSYSTEMS (i.e., national parks and the larger ecosystems in which they are located) is challenging for two reasons. First, national parks face numerous internal and external threats that are increasing over time (Dilsaver 1994; Prato 2005). National Park Service (NPS) policy encourages park managers to use their statutory authorities to protect natural resources and park values from these threats. In this regard, NPS policy states: "Strategies and actions beyond park boundaries have become increasingly necessary as the National Park Service strives to fulfill its mandate.... Recognizing that parks are integral parts of larger regional environments, the Service will work cooperatively with others to ... protect park resources and values and ... address mutual interests ... such as compatible economic development and resource and environmental protection" (NPS 2001). Canada's first State of the National Parks Report recognized that "none of the parks was immune to internal and external threats" and cited "water pollution, poaching, and logging on lands adjacent to park boundaries as some of the major threats to the integrity of parklands" (McNamee 2002).

Second, managing national park ecosystems is challenging because park managers cannot accurately determine ecosystem states and predict the outcomes of management actions due to uncertainty. Four sources of uncertainty arise. First, variability in social, demographic, ecological, and economic factors makes it difficult to infer the state of an ecosystem from observed conditions and predict ecosystem responses to management actions in advance of their implementation. Second, sampling and measurement errors make it difficult to precisely measure ecosystem conditions. Third, incomplete knowledge of ecosystems prevents accurate assessment of ecosystem states. Fourth, there is often disagreement or uncertainty about the attributes of desirable ecosystem states (Peterman and Peters 1998; Conroy 2000).

Adaptive management (AM) provides an appropriate framework for managing ecosystems subject to multiple sources of uncertainty (Prato 2000, 2003, 2005). Specifically, AM: (1) increases the rate at which policy makers and resource managers acquire knowledge about ecological relationships; (2) aids management decisions through the use of iterative hypothesis-testing; (3) enhances information flows among policy makers; and (4) creates shared understandings among scientists, policy-makers, and managers (Peterman 1977; Holling 1978; Clark et al. 1979; McLain and Lee 1996; Wondolleck and Yaffe 2000).

This article proposes an AM framework for national park ecosystems. The next section presents an overview of AM. The third section discusses the use of AM

for national park ecosystems. The fourth section describes the impacts of land development on ecosystems. The fifth section contains a hypothetical example of AM of Montana's Northern Continental Divide Ecosystem for recovery of grizzly bears. A summary and conclusions are given in the last section.

# Overview of adaptive management

The concept of AM surfaced in the mid-1970s as a way of managing ecosystems under uncertainty (Holling 1978; Walters and Holling 1990; Irwin and Wigley 1993; Walters 1996; Parma et al. 1998). The basic premise of AM is that "if human understanding of nature is imperfect, then human interactions with nature [e.g., management actions] should be experimental" (Lee 1993). Kohm and Franklin (1997) state that "adaptive management is the only logical approach under the circumstances of uncertainty and the continued accumulation of knowledge." Woodley (2002) points out that, "because of the difficulty in predicting ecosystem response, active management should be undertaken in national parks using adaptive management techniques."

AM is useful in making decisions about the state of an ecosystem and ecosystem responses to alternative management actions when there is uncertainty. It involves major investments in research, monitoring, and modeling to test alternative hypotheses about sustainable use and management of natural resources (Smith and Walters 1981; Hilborn et al. 1995; Walters and Green 1997). In an AM approach, public land managers experimentally test management actions so as to maximize their capacity to learn about ecosystem responses to those actions while simultaneously attempting to

satisfy management objectives.

AM can be passive or active. Passive AM uses models to predict ecosystem responses to management actions and select best management actions, and employs monitoring data to revise the parameters of the models (Walters and Hilborn 1978; Hilborn 1992). Passive AM is relatively simple and inexpensive to apply because it does not require replication and randomization of treatments. Unfortunately, this feature makes passive AM knowledge about ecosystem states and responses to management actions unreliable (Wilhere 2002).

Active AM tests hypotheses about ecosystem states and responses to management actions by treating management actions as experiments that generate information for testing hypotheses about ecosystem states and responses. For example, a manager could use AM to test hypotheses about whether a national park ecosystem is in a desirable or undesirable state. If the state is judged to be undesirable, then management actions should be taken to achieve a desirable state. Unlike a trial-and-error approach that provides slow and random accumulation of information, the information provided by active AM is reliable (Lee 1993).

There are ten prerequisites for successful application of active AM (Lee 1993; Wilhere 2002; Prato and Fagre 2005).

1. There must be a mandate to take action in the face of uncertainty. National park managers need to realize that the outcomes of most management actions are uncertain. Experimentation and learning in national park ecosystems are at best secondary objectives that are likely to be dismissed or not even proposed if they conflict with primary objectives, such as recreation and natural resource protection. However, most

national park managers know that ecosystem states and effects of certain management actions are uncertain.

- 2. Preservation of pristine environments is no longer an option. While many national parks have remarkable natural and cultural resources, very few are totally pristine. Even national parks that are relatively pristine are subject to human disturbance both within and outside their boundaries and, hence, must be treated as managed ecosystems.
- 3. Human intervention is not capable of producing desired outcomes predictably. AM is not needed when ecosystem states and management outcomes are predictable. Unpredictability occurs because management actions have uncertain outcomes.
- 4. There must be sufficient institutional stability to measure long-term outcomes. AM experiments need to be carried out over the long term in order to capture the relatively slow responses of ecosystems to human interventions. The institutional environment for many national parks is stable because the management agency is charged with managing the park in accordance with objectives established in an organic act. However, there are sources of institutional instability, including turnover in upper management, declining budgets, and, in some countries, political instability and war. In any event, institutional stability is typically outside the control of experimenters and managers.
- 5. It must be possible to formulate hypotheses. Based on past experience and scientific knowledge, national park managers should be able to design experiments to test hypotheses about ecosystem states and responses to management actions. It is generally not technically, financially, or politically feasible to test all relevant hypotheses.

- 6. Theory, models, and field methods must be available to estimate and infer ecosystem-scale behavior. While scientific knowledge about ecological and socioeconomic relationships for national park ecosystems is incomplete, there is usually sufficient understanding of the ecosystem to design monitoring, research, and evaluation programs, and to design sampling schemes to collect the data needed to test hypotheses regarding ecosystem states and responses to management actions. AM increases knowledge by promoting learning. Preliminary results might indicate that the experimental design was faulty or certain management actions are not likely to achieve desirable ecosystem states or outcomes. The latter increases the pressure to change management actions before experiments are completed, which is disruptive.
- 7. Decision-makers need to view management actions as experiments and uncertainty about outcomes as potential hazards. The idea of experimenting with national park ecosystems, particularly highly visible ones, is not likely to be well received because it admits the possibility that management actions can fail to achieve desired social, economic, and ecological objectives. Park managers need to communicate these risks to the public and stakeholders and explain that even if experiments do not achieve desirable outcomes, they are valuable because they improve ecosystem knowledge.

AM for highly sensitive issues, like recovery of declining species, can be designed to minimize the risk of management actions failing to recover the species. For example, risky experiments can be done in an area of a national park ecosystem where human and environmental factors are easier to control. Minimizing the risk of

adverse consequences needs to be balanced with maximizing the information value of experiments. Politicians seeking opportunities to increase their chances of re-election are likely to oppose experiments that could adversely affect the welfare of their constituents.

8. Organizational culture must encourage learning from experience and the culture must value reliable information. While national park managers are generally willing to learn from experience, they often evaluate their actions based on casual observation and unreplicated actions. Active AM requires setting in place monitoring, research, and evaluation programs that provide statistically reliable data for testing hypotheses about ecosystem states and the effectiveness of management actions in achieving desirable outcomes. If long-term learning through AM provides benefits to staff (usually the ones implementing the experiments) but not to managers, then a struggle is likely to ensue for organizational control.

9. Resources must be sufficient to measure ecosystem-scale behavior. Monitoring for AM is a long-term, expensive proposition, which makes AM vulnerable to insufficient budgets, changes in policy, and controversy. New managers and administrators may not understand or support an experimental approach to management.

10. Decision-makers must care about improving outcomes over biological time scales. The cost of monitoring controls and replication is high at the outset relative to the costs of unmonitored trial and error. National park managers may not have the motivation, patience, and budget to implement long-term AM experiments, especially if their term of office is significantly less than biological time scales, which is almost

always the case. For example, a national park manager under pressure to sustain and increase visitation is likely to be less concerned with biological impacts of higher visitation, especially when the experiments needed to test hypotheses regarding those impacts require many years to complete.

Of the ten prerequisites for active AM, numbers 1, 2, 3, 5, 6, and 7 are likely to be satisfied, while numbers 4, 8, 9, and 10 are unlikely to be satisfied.

There are two ways to improve the success of AM. First, management actions need to be substantial in order to ensure that the natural variability inherent in ecosystems does not overwhelm the effects of management actions. Second, a management action needs to be relatively simple in order to ensure detection of ecosystem responses to that action. Due to ecological uncertainties, managers should expect to be surprised by certain management outcomes. Surprise should not be viewed as the failure to predict ecological responses, but rather an opportunity to learn more about the ecosystem (Lee 1993).

Even if conditions for implementing active AM are ideal, it has several limitations. First, it is more time-consuming, complex, and costly than other forms of management, such as passive AM, trial-anderror, and deferred action (Walters and Hilborn 1978; Walters and Holling 1990). Second, it can give faulty results when relevant variables are either ignored or not held constant (Smith 1997). Third, it has certain application pitfalls. For example, there have been instances of AM in New Brunswick and British Columbia, Canada, as well as in the Columbia River Basin, that relied extensively on the use of linear systems models, discounted non-scientific forms of knowledge, and paid inadequate attention to policy processes that promote the development of shared understandings among diverse stakeholders (McLain and Lee 1996). Fourth, AM forthrightly tests management actions that may not necessarily achieve desired outcomes, which can be politically unpopular (Lee 1993). These limitations can be alleviated by incorporating knowledge from multiple sources, using several systems models, utilizing new forms of cooperative decision-making (McLain and Lee 1996), and educating politicians and managers about the benefits and risks of AM.

#### Use of adaptive management

AM has been used or recommended for use in managing national parks. Banff National Park in Alberta, Canada, is using passive AM to develop its human use management strategy for the park. The strategy is expected to generate new knowledge and understanding (learning) about "the complex relationship between ecological integrity and human use" (Parks Canada 2001). Elk Island National Park in Alberta, Canada, is using an adaptive landscape management approach to manage populations of elk and bison in the park (Woodley 2002). The National Research Council (NRC) report on natural regulation of ungulates in Yellowstone National Park's northern range recommended that "to the degree possible, all management at YNP should be done as adaptive management" (National Research Council 2002a). The NRC report stated that active AM would improve scientific understanding of the consequences of different management actions and the park could continue natural regulation of ungulates within an AM framework.

The draft supplemental environmental

impact statement (SEIS) for winter use in Yellowstone National Park, Grand Teton National Park, and the John D. Rockefeller, Jr., Memorial Parkway that connects the two parks proposed three management alternatives. Alternatives 2 and 3, which do not ban snowmobile use in these areas, employ AM to "mitigate impacts on visitor experience and access, wildlife, air quality and natural sound while allowing snowmobile access on all existing oversnow routes" (National Park Service 2002). The draft SEIS states that "the first step in adaptive management is to develop and implement a management scenario based on the best available information." This implies a passive AM approach. Specifically, Alternative 2 establishes interim visitor use limits for each of the six road segments having snowmobile use. Interim use limits are predicted to keep impacts of snowmobile use within acceptable limits defined in terms of standards for visitor experiences and park resources. Monitoring is done to determine whether use impacts violate the standards. If the latter occurs, then park managers decrease use limits and adjust related management actions in an effort to achieve the standards.

The Comprehensive Everglades Restoration Plan (CERP) is the world's "largest and most ambitious ecosystem restoration" project involving an expected expenditure of \$8 billion over 30 years to restore the hydrology of South Florida, which includes Everglades National Park (Best 2000; Kiker et al. 2001; Sklar et al. 2001). A desirable feature of the CERP process is that planners have flexibility to refine and revise it "as part of [an] adaptive assessment process" (U.S. Army Corps of Engineers and South Florida Water Management District 2000). An adaptive learning approach is being

used because ecosystem restoration at the scale and complexity of South Florida and the Everglades is beyond the current knowledge and experience base of the scientific community. Adaptive learning, which is the learning component of adaptive management, entails "continuous growth in understanding by scientists, managers, policy makers, political representatives and the public" (Kiker et al. 2001). Specifically, the shared understandings of ecological and socioeconomic processes that emerge from adaptive learning feed into the adaptive management process, particularly the formulation of management action(s).

Active AM is being used in the lower Colorado River, which flows through Grand Canyon National Park, to improve understanding of how water releases from Glen Canyon Dam influence sediment, fish, vegetation, wildlife and habitat, endangered and other special-status species, cultural resources, air quality, recreation, hydropower, and non-use values (Glen Canyon Adaptive Management Program 2003).

#### Impacts of land development

A major threat to the ecological integrity of national park ecosystems is the conversion of agricultural, ranch, and forest lands to residential, commercial, and resort developments. Land development reduces open spaces and increases road density, human use of roads, and landscape fragmentation, which are especially detrimental to large carnivores, such as grizzly bear, mountain lion, and wolves. For instance, studies show that the effectiveness of grizzly bear habitat decreases with increases in road density and human presence (Mace et al. 1996). Mortality risk is higher for grizzly bears that travel through fragmented landscapes because it increases their encounters with humans and vehicles (Harris and Gallagher 1989). Hence, one way to improve grizzly bear habitat is to restrict land development.

Restrictions on land development can take many forms, including decreasing housing density, requiring bear proof garbage containers, limiting the use of bird feeders, limiting the planting of fruit trees, and controlling other bear attractants. Such restrictions can be implemented by amending zoning and subdivision regulations and land use plans. In addition, it may be possible to improve grizzly bear habitat via land donations, land purchases, land trusts, land exchanges, and conservation easements (Brown 1999).

#### A hypothetical example

This section describes a hypothetical example of active AM for assessing grizzly bear recovery in the Northern Continental Divide Ecosystem (NCDE) in northwest Montana (see Figure 1). Grizzly bear is a threatened species in the NCDE. The NCDE covers 32,300 km<sup>2</sup> (8 million acres), and contains Glacier National Park, the adjacent Waterton/Castle area in southern Alberta, the Bob Marshall Wilderness complex, and private lands. It is one of six recovery zones defined in the Grizzly Bear Recovery Plan for the United States. The NCDE recovery zone contains the greatest number of grizzly bears (400+) and is the only zone contiguous to a strong Canadian population of grizzly bear. For these reasons, the NCDE may offer the best prospect for long-term survival of the grizzly bear (U.S. Fish and Wildlife Service 2003; U.S. Geological Survey, 2004).

The hypothetical example divides the NCDE into bear management units for the purpose of testing hypotheses about grizzly bear mortality and recovery. If hypothesis

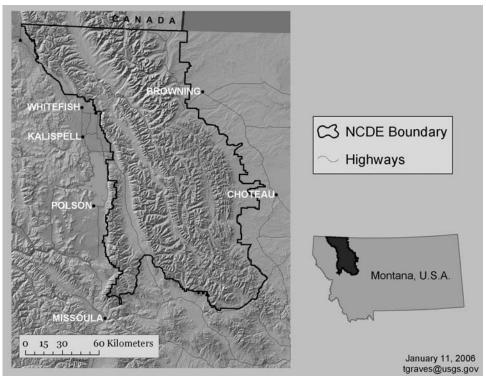


Figure 1. Grizzly bear distribution and recovery area in Northern Continental Divide Ecosystem. Source: U.S. Geological Survey (2004).

testing indicates that recovery is not being achieved in the ecosystem, then management action is taken to reduce mortality. To make the example concrete, the management action for improving grizzly bear habitat is to impose restrictions on land development in critical habitat areas. Land development in the ecosystem has an important bearing on grizzly bear recovery because the majority of human-bear conflicts and bear deaths occur on private land, which makes up 17% of the ecosystem (U.S. Fish and Wildlife Service 2005). Other management actions could be considered as well.

It is difficult to conduct true statistical experiments at the ecosystem scale. However, it is feasible to conduct pseudoexperiments to test hypotheses regarding

grizzly bear recovery. Pseudo-experiments are not true statistical experiments because: (1) it is usually not feasible to have a control (e.g., another ecosystem in which the management action is not implemented); (2) it is often not possible to experimentally vary treatment levels (e.g., varying the rates of housing densities); (3) even if different treatments could be implemented in the same ecosystem, they may not be spatially independent (i.e., restricting housing densities in one bear management unit is likely to influence bear mortality in other units); and (4) it is difficult to control for other factors influencing bear mortality, such as weather, food availability, and logging operations.

The hypothetical example has two ecosystem states,  $\Theta_c$  and  $\Theta_l$ , two competing

hypotheses, H<sub>c</sub> and H<sub>I</sub>, and two management actions,  $a_1$  and  $a_2$ .  $\Theta_C$  signifies the ecosystem state is compatible (C) and  $\Theta_1$ signifies it is incompatible (I) with recovery of grizzly bear. H<sub>C</sub> states the bear mortality rate is compatible ( $\Theta = \Theta_c$ ) and  $H_1$  states the mortality rate is incompatible ( $\Theta = \Theta_i$ ) with grizzly bear recovery goals for the NCDE. Management action a<sub>1</sub> imposes restrictions on land development and management action a2 does not restrict land development on private lands. Prior probabilities for the two ecosystem states are  $p(\Theta_c)$  and  $p(\Theta_l)$ , where  $p(\Theta_1) = 1 - p(\Theta_2)$ , and can be either estimated using suitable data or subjectively determined using expert knowledge, such as by the Delphi method. The latter is a structured procedure that uses questionnaires and controlled opinion feedback to collect and synthesize knowledge about a particular value from a group of experts (Bakus et al. 1982; Turoff and Linstone 2002). A subjective probability reflects the decision-maker's personal knowledge and beliefs about the likelihood of the hypotheses being true before experiments are conducted.

Posterior probabilities for  $\Theta_c$  and  $\Theta_l$  are calculated using Bayes' theorem as follows:

$$p(\Theta_c|X = X_0) = [p(\Theta_c) p(X = X_0|\Theta_c)]/p(X = X_0)$$

$$\begin{aligned} p(\Theta_{i}|X = X_{o}) &= [p(\Theta_{i}) \ p(X = X_{o}|\Theta_{i})]/p(X=X_{o}). \end{aligned}$$

X is the number of sampled areas in the NCDE that have high rates of bear mortality,  $X_0$  is a particular value of X,  $p(X = X_0) = p(\Theta_c) p(X = X_0|\Theta_c) + p(\Theta_l) p(X = X_0|\Theta_l)$ , and  $p(X = X_0|\Theta_c)$  and  $p(X = X_0|\Theta_l)$  are the likelihoods that  $X = X_0$  given the ecosystem

state is  $\Theta_c$  and  $\Theta_l$ , respectively. Likelihood functions can be estimated. For example, suppose X is normally distributed. The likelihood function for a sample drawn from this distribution has a normal distribution with sample mean z´ and standard deviation s/(n)<sup>1/2</sup>, where s is the sample standard deviation and n is the sample size (Prato 2000).

Suppose 12 bear management units in the NCDE are randomly sampled (n = 12) and the number of units out of 12 with high bear mortality (X) determined. If test results do not lead to rejection of H1, then mortality rates are high and land development restrictions are justified. Otherwise, land management restrictions are not justified. In an actual application, the sample size would be greater than 12 provided there are more than 12 bear management units in the NCDE. The hypothetical example uses a sample size of 12 in order to keep the following example tables manageable. Table 1 summarizes hypothetical likelihoods or probabilities of values of X between 0 and 12, the posterior probability that the ecosystem state is  $\Theta_{I}$  for  $p(\Theta_{I}) = 0.84$ , the most likely ecosystem state ( $\Theta_c$  or  $\Theta_I$ ), and the resulting decision regarding whether or not to restrict land development in the NCDE.

Hypothetical sampling results indicate that land development should not be restricted ( $H_1$  rejected and  $a_2$  selected) for  $X \le 4$  because the posterior probabilities for these values of X are less than 0.05, a commonly specified value of  $\alpha$  (Type I error, or probability of deciding not to restrict land development when the ecosystem state is incompatible with recovery). Land development should be restricted for  $9 \le X \le 12$  ( $H_1$  not rejected and  $a_1$  selected) because the posterior probabilities for these values of X exceed 0.95. The latter is the probability of

Number of areas with high	Likelihood of observing X	Likelihood of observing X	Posterior probability of $\Theta_I$	Most likely ecosystem state	Land development decision
rates of bear	when $\Theta = \Theta_I$	when $\Theta = \Theta_C$	$p(\Theta_I X)^a$		
mortalitya	$p(X \Theta = \Theta_I)^b$	$p(X \Theta=\Theta_C)^c$			
(X)					
0	0.000	0.001	0.000	$\Theta_{\mathbb{C}}$	do no restrict (a <sub>2</sub> )
1	0.000	0.008	0.000	$\Theta_{\rm C}$	do no restrict (a2)
2	0.000	0.034	0.000	$\Theta_{\mathrm{C}}$	do no restrict (a2)
3	0.000	0.092	0.000	$\Theta_{\rm c}$	do no restrict (a2)
4	0.001	0.170	0.030	$\Theta_{\rm C}$	do no restrict (a2)
5	0.003	0.222	0.066	inconclusive	ambiguous
6	0.016	0.212	0.284	inconclusive	ambiguous
7	0.053	0.149	0.651	inconclusive	ambiguous
8	0.133	0.076	0.902	inconclusive	ambiguous
9	0.236	0.028	0.978	$\Theta_{\rm I}$	restrict (a <sub>1</sub> )
10	0.283	0.007	0.995	$\Theta_{\mathrm{I}}$	restrict (a <sub>1</sub> )
11	0.206	0.001	0.999	$\Theta_{\rm I}$	restrict (a1)
12	0.069	0.000	1.000	$\Theta_{\rm I}$	restrict (a <sub>1</sub> )

a. Based on bear mortality in the area resulting from human-bear interactions (excluding deaths from natural causes) relative to recovery goals.

Source: Adapted from Bergerud and Reed (1998).

Table 1. Hypothetical likelihoods that X areas out of 12 have high rates of grizzly bear mortality for ecosystem states  $\Theta_i$  and  $\Theta_{C_i}$  posterior probabilities for  $\Theta_{\nu}$  and associated land development decision.

deciding to restrict land development when the ecosystem is incompatible with recovery (power of the test). For  $5 \le X \le 8$ , posterior probabilities are between the Type I error (0.05) and power of the test (0.95), which indicates inconclusive or ambiguous evidence about the most likely state of the NCDE with respect to grizzly bear recovery. The decision of whether or not to restrict land development is ambiguous for  $5 \le X \le 8$ .

Ambiguous decisions can be eliminated using a *Bayes action*. The latter mini-

mizes the expected loss or equivalently maximizes the expected gain over all possible actions with respect to the posterior probability distribution. If  $a_j$  is selected when the ecosystem state is  $\Theta_i$ , then expected loss is  $L(a_j, \Theta_i)$ , or equivalently expected gain is  $G(a_j, \Theta_i) = -L(a_j, \Theta_i)$  where i, j = 1, 2. The Bayes action is determined by comparing the *Bayes gain* (BG) (Morgan and Henrion 1990) for the two management actions using the hypothetical expected gains shown in Table 2. (The BG is a weighted average of the gains for an action

b.  $\Theta_I$  indicates the ecosystem state is incompatible with grizzly bear recovery.

c.  $\Theta_{\mathbb{C}}$  indicates the ecosystem state is compatible with grizzly bear recovery.

Compatible (
$$\Theta_C$$
)  $G(a_1, \Theta_C) = -\$1,000/a$ cre  $G(a_2, \Theta_C) = \$800/a$ cre Incompatible ( $\Theta_I$ )  $G(a_1, \Theta_I) = \$500/a$ cre  $G(a_2, \Theta_I) = -\$1,500/a$ cre

- a. Restrict land development.
- b. Do not restrict land development.

Table 2. Hypothetical expected gains for  $a_1$  and  $a_2$  with ecosystem states  $\Theta_c$  and  $\Theta_1$ .

with weights given by the posterior probabilities for ecosystem states.) For X = 8 (i.e., one of the values of X for which the decision is ambiguous), BGs for  $a_1$  and  $a_2$  are:

$$BG(a_1) = p(\Theta_1|X = 8) G(a_1, \Theta_1) + p(\Theta_1|X = 8) G(a_1, \Theta_2) = $353$$

$$BG(a_2) = p(\Theta_1|X = 8) G(a_2, \Theta_1) + p(\Theta_C|X = 8) G(a_2, \Theta_C) = -\$1,275$$

The Bayes action is  $a_1$  if  $BG(a_1) > BG(a_2)$ , or  $a_2$  if  $BG(a_2) > BG(a_1)$ . Therefore,  $a_1$  (restricting land development) is the Bayes action for X = 8. BGs and Bayes actions for all possible values of X are given in Table 3.  $H_1$  is not rejected and the Bayes action is not to restrict land development  $(a_2)$  for  $X \le 6$ .  $H_1$  is rejected and the Bayes action is to restrict land development  $(a_1)$  for  $X \ge 7$ .

Table 3 represents hypothetical results for one pseudo-experiment. Ideally, AM for grizzly bear recovery should be implemented as a sequence of pseudo-experiments. To illustrate the procedure, let X = 6 for the first experiment. If the hypothetical results for the first experiment are as shown in Table 3, then  $H_1$  is rejected for X = 6 and

land development restrictions are not imposed. Suppose land development continues after the first experiment is completed prompting the decision-maker to conduct a second experiment-say, five years after the first one. The posterior probability from the first experiment,  $p(\Theta_1|X=6) =$ 0.284, becomes the prior probability of  $\Theta_1$ for the second experiment. Since the benefits and costs of restricting land development are likely to change over time, expected gains (see Table 2) should be updated each time a new experiment is conducted. Suppose the second experiment favors nonrejection of H<sub>1</sub>. This implies land development should be restricted. These hypothetical results indicate mortality rates for grizzly bear worsened in the five-year period between the first and second experiments. If financially feasible, the pseudo-experiments should continue at least until the species is recovered.

The NRC report on recovering the Missouri River Ecosystem recommends formation of a "representative stakeholder committee to develop a basinwide strategy, conduct assessments, review plans, and provide oversight of the implementation of

Number of areas with high rates of bear mortality (X)	Posterior probability $ of  \Theta_I \\ p(\Theta_I   X)^a $	Bayes Gain for a <sub>1</sub> (\$/acre)	Bayes Gain for a <sub>2</sub> (\$/acre)	Bayes action for land development
0	0.000	-1,000	800	do not restrict (a <sub>2</sub> )
1	0.000	-1,000	800	do not restrict (a <sub>2</sub> )
2	0.000	-999	798	do not restrict (a2)
3	0.000	-996	793	do not restrict (a2)
4	0.030	-976	763	do not restrict (a2)
5	0.066	-891	632	do not restrict (a2)
6	0.284	-585	163	do not restrict (a2)
7	0.651	-22	-700	restrict (a <sub>1</sub> )
8	0.902	353	-1,275	restrict (a <sub>1</sub> )
9	0.978	467	-1,449	restrict (a <sub>1</sub> )
10	0.995	493	-1,489	restrict (a <sub>1</sub> )
11	0.999	499	-1,498	restrict (a <sub>1</sub> )
12	1.000	500	-1,500	restrict (a <sub>1</sub> )

a. Same as the fourth column in Table 1.

Source: Adapted from Bergerud and Reed (1998) and Prato (2005).

Table 3. Hypothetical Bayes gains and Bayes posterior decisions for all possible values of X.

adaptive management initiatives" and collaborative involvement of a broad range of stakeholders in adaptive management of the Missouri River ecosystem (National Research Council 2002b). Similarly, Gunderson et al. (1995) recognize that "involvement and education of people who are part of the ecosystem as crucial to building resilient solutions and removing gridlock." Prato (2003) suggests forming an adaptive management working group for Waterton-Glacier International Peace Park. Since grizzly bear recovery is of interest to a wide range of stakeholders, it would be worthwhile to form an AM working group to facilitate recovery of grizzly bear in the

NCDE. The working group would evaluate experimental results and decisions about whether or not to restrict land development; compare the social, economic, and ecological consequences of restricting land development; and recommend specific ways to restrict land development when justified by the pseudo-experiments.

# Summary and conclusions

Management of national park ecosystems is challenging because ecosystems face a multiplicity of threats and impacts, many of which are external to the park but internal to the greater ecosystem in which the park is located. In addition, management of

national park ecosystems is subject to multiple sources of uncertainty. National park managers in North America have been encouraged to develop strategies and actions to protect natural resources and values from external threats.

AM has been used or recommended for use in managing national park ecosystems when there is uncertainty regarding the state of the ecosystem and ecosystem responses to management actions. The basic premise of AM is that management actions need to be experimental due to imperfect understanding of ecological processes. Although passive AM is relatively simple and inexpensive to apply, the lack of replication and randomization of treatments renders the knowledge it provides about ecosystem states and ecosystem responses to management actions unreliable. Active AM views management actions as treatments in statistically valid experiments that replicate and randomize treatments, and generate data suitable for testing hypotheses about the state of an ecosystem and ecosystem responses to management actions. Some prerequisites for active AM are unlikely to be satisfied.

Land development in the NCDE has accelerated habitat loss and degradation for grizzly bear, which is a threatened species in the NCDE. Active AM experiments are impractical for managing grizzly bear recovery. The hypothetical example presented here conducts pseudo-experiments that involve two ecosystem states, two competing hypotheses, and two management actions for bear recovery. Pseudo-experiments provide data on the number of sampled areas in the NCDE having unacceptable rates of bear mortality (X). Bayes' theorem is used to calculate posterior probabili-

ties that combine the data with prior probabilities of ecosystem states, and likelihood functions for X given the ecosystem state is incompatible with recovery. Posterior probabilities are used to decide whether or not to restrict land development in the NCDE or implement another policy in order to recover grizzly bear. The hypothetical example leads to ambiguous decisions about ecosystem states and whether or not to impose restrictions on land development for certain values of X.

Ambiguous decisions can be eliminated by determining the Bayes action, which minimizes the expected loss or, equivalently, maximizes the expected gain over all possible actions with respect to the posterior probability distribution. The Bayes action is that which has the highest Bayes gain (BG). The latter is a weighted average of the gains for an action with weights given by the posterior probabilities for ecosystem states. Determination of the Bayes action requires information on the expected gains with different management actions. Implementing active AM with Bayesian statistics entails conducting sequential pseudo-experiments in which the posterior probability from one experiment becomes the prior probability for the subsequent experiment.

It is best to implement AM with the assistance of a working group that reviews experimental results; evaluates the social, economic, and ecological consequences of restricting land development; and recommends policies to restrict land development when justified by experimental results. National park managers, community planners, scientists, environmental groups, and developers are likely candidates for membership in an AM working group for grizzly bear recovery.

#### References

- Bakus, G.J., W.G. Stillwell, S.M. Latter, and M.C. Wallerstein. 1982. Decision making: With application for environmental management. *Environmental Management* 6, 493–504.
- Bergerud, W.A., and W.J. Reed. 1998. Bayesian statistical methods. In Statistical Methods for Adaptive Management Studies. Land Management Handbook no. 42. V. Sit and B. Taylor, eds. Victoria: Research Branch, British Columbia Ministry of Forestry, 89–104.
- Best, G.R., ed. 2000. Greater Everglades Ecosystem Restoration (GEER) Science Conference: Defining Success (Proceedings). Miami: South Florida Ecosystem Restoration Task Force and Working Group and U.S. Geological Survey.
- Brown, P. 1999. Tools for ecological stewardship. In *Ecological Stewardship: A Common Reference for Ecosystem Management*. Vol. III. W.T. Sexton, A.J. Malk, R.C. Szaro, and N.C. Johnson, eds. Oxford: Elsevier Science, 463–496.
- Clark, W.C., D.D. Jones, and C.S. Holling. 1979. Lessons for ecological policy design: A case study of ecosystem management. *Ecological Modeling* 7, 1–53.
- Conroy, M.J. 2000. Mapping biodiversity for conservation and land use decisions. In *Spatial Information for Land Use Management*. M.J. Hill and J. Aspinall, eds. Amsterdam: Gordon and Breach Science Publishers, 145–158.
- Dilsaver, L.M., ed. 1994. America's National Park System: The Critical Documents. Lanham, Md.: Rowman & Littlefield.
- Franklin, J.F. 1997. Ecosystem management: An overview. In *Ecosystem Management: Applications for Sustainable Forest and Wildlife Resources*. M.S. Boyce and A. Haney, eds. New Haven, Conn.: Yale University Press, 21–53.
- Glen Canyon Adaptive Management Work Group. 2003. Glen Canyon Adaptive Management Program. On-line at www.uc.usbr.gov/amp/amwg/dsc\_amwg.html.
- Gunderson, L.H., C.S. Holling, and S.S. Light, eds. 1995. *Barriers and Bridges to the Renewal of Ecosystems and Institution*. New York: Columbia University Press.
- Harris, L.D., and P.B. Gallagher. 1989. New initiatives for wildlife conservation: The need for movement corridors. In *Preserving Communities and Corridors*. G. Mackintosh, ed. Washington, D.C.: Defenders of Wildlife, 11–34.
- Hilborn, R. 1992. Can fisheries agencies learn from experience? Fisheries 17, 6-14.
- Hilborn, R., C.J. Walters, and D. Ludwig. 1995. Sustainable exploitation of renewable resources. *Annual Review of Ecology and Systematics* 26, 45–67.
- Holling, C.S. 1978. Adaptive Environmental Assessment and Management. Chichester, U.K.: John Wiley & Sons.
- Irwin, L.L., and T.B. Wigley 1993. Toward and experimental basis for protected forest wildlife. *Ecological Applications* 3, 213–217.
- Kiker, C.F., J.W. Milon, and A.W. Hodges. 2001. Adaptive learning for science-based policy: The Everglades restoration. *Ecological Economics* 37, 403–416.
- Kohm, K.A., and J.F. Franklin. 1997. Introduction. In Creating Forestry for the 21st Century: The Science of Ecosystem Management. K.A. Kohm and J.F. Franklin, eds. Washington, D.C.: Island Press, 1–5.
- Lee, K.N. 1993. Compass and Gyroscope: Integrating Science and Politics for the Environment. Washington, D.C.: Island Press.

- Mace, R.K., J. Waller, T. Manley, L.J. Lyon, and H. Zuring. 1996. Relationships among grizzly bears, roads, and habitat in the Swan Mountains, Montana. *Journal of Applied Ecology* 33, 1395–1404.
- McLain, R.J., and R.G. Lee. 1996. Adaptive management: Promises and pitfalls. *Environmental Management* 20, 437–448.
- McNamee, K. 2002. From wild places to endangered spaces: A history of Canada's national parks. In *Parks and Protected Areas in Canada: Planning and Management*. 2nd ed. P. Dearden and R. Rollins, eds. Dons Mills, Ont.: Oxford University Press, 21–50.
- Morgan, M.G., and M. Henrion. 1990. *Uncertainty: A Guide to Dealing with Uncertainty in Quantitative Risk and Policy Analysis*. Cambridge, U.K.: Cambridge University Press.
- NPS [National Park Service]. 2000. Management Policies 2001. Washington, D.C.: NPS.
- ——. 2002. Winter use plans: Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr., Memorial Highway. On-line at www.nps.gov/grte/winteruse/intro.htm.
- National Research Council. 2002a. Ecological dynamics on Yellowstone's Northern Range: The report of the National Academy of Sciences. Chapter 5: Conclusions and recommendations. *Yellowstone Science* 10, 3–11.
- ——. 2002b. *The Missouri River Ecosystem: Exploring the Prospects for Recovery*. Washington, D.C.: National Academy Press.
- Parks Canada. 2001. Record of 2001 Forum. Appendix B: Discussion paper: Working towards a strategy for human use management in Banff National Park. On-line at www.worldweb.com/ParksCanada-Banff/management\_planning/record\_of\_2001\_Forum/AppendixBe.htm.
- Parma, A.M., and the NCEAS Working Group on Population Management. 1998. What can adaptive management do for our fish, forest, food, and biodiversity? *Integrative Biology* 1, 16–26.
- Peterman, R.M. 1977. Graphical evaluation of environmental management options: Examples from a forest-insect pest system. *Ecological Modelling* 3, 133–148.
- Peterman, R.M., and C.N. Peters. 1998. Decision analysis: Taking uncertainties into account in forest resource management. In *Statistical Methods for Adaptive Management Studies*. Land Management Handbook no. 42. V. Sit and B. Taylor, eds. Victoria: Research Branch, British Columbia Ministry of Forestry, 105-127.
- Prato, T. 2000. Multiple attribute Bayesian analysis of adaptive ecosystem management. *Ecological Modelling* 133, 181–193.
- ——. 2003. Adaptive management of large rivers with special reference to the Missouri River. *Journal of the American Water Resources Association* 39, 935–946.
- ——. 2005. Bayesian adaptive management of ecosystems. *Ecological Modeling* 183, 146–156.
- Sklar, F.H., H.C. Fitz, Y. Wu, R. Van Zee, and C. McVoy. 2001. The design of ecological landscape models for Everglades restoration. *Ecological Economics* 37, 379–401.
- Smith, A.D.M., and C.J. Walters. 1981. Adaptive management of stock recruitment systems. Canadian Journal of Fisheries and Aquatic Sciences 38, 690–703.
- Smith, G.R. 1997. Making decisions in a complex and dynamic world. In *Creating Forestry* for the 21st Century: The Science of Ecosystem Management. K.A. Kohm and J.F. Frank-

- lin, eds. Washington, D.C.: Island Press, 419-435.
- Turoff, M., and H. Linstone, eds. 2002. *The Delphi Method: Techniques and Applications*. On-line at www.is.njit.edu/pubs/delphibook/.
- U.S. Army Corps of Engineers and South Florida Water Management District. 2000. Master Program Management Plan, Comprehensive Everglades Restoration Plan. West Palm Beach, Fla.: South Florida Water Management District.
- U.S. Fish and Wildlife Service. 2003. *Grizzly Bear Recovery, Overview and Update*. On-line at http://mountain-prairie.fws.gov/endspp/grizzly/.
- ——. 2005. Grizzly Bear Recovery, Northern Continental Divide Ecosystem. On-line at http://mountain-prairie.fws.gov/species/mammals/grizzly/.
- U.S. Geological Survey. 2004. Northern Continental Divide Ecosystem (NCDE) Objectives. Northern Rocky Mountain Science Center. On-line at http://nrmsc.usgs.gov/.
- Walters, C.J., and R. Hilborn. 1978. Ecological optimization and adaptive management. Annual Review of Ecology and Systematics 9, 157–188.
- Walters, C.J., and C.S. Holling. 1990. Large-scale management experiments and learning by doing. *Ecology* 71, 2060–2068.
- Walters, C. 1996. *Adaptive Management of Renewable Resources*. New York: Macmillan and Co.
- Walters, C.J., and R. Green. 1997. Valuation of experimental management options for ecological systems. *Journal of Wildlife Management* 61, 987–1006.
- Wilhere, G.F. 2002. Adaptive management in habitat conservation plans. *Conservation Biology* 16, 20–29.
- Wondolleck, J.M., and S.L. Yaffee. 2000. Making Collaboration Work: Lessons from Innovation in Natural Resource Management. Washington, D.C.: Island Press.
- Woodley, S. 2002. Planning and managing for ecological integrity in Canada's national parks. In *Parks and Protected Areas in Canada: Planning and Management*. 2nd ed. P. Dearden and R. Rollins, eds. Dons Mills, Ont.: Oxford University Press, 97–114.

Tony Prato, Center for Agricultural, Resource and Environmental Systems (CARES), 212
Mumford Hall, University of Missouri, Columbia, Missouri 65211;
pratoa@missouri.edu

# Partners in Parks: 1988-2006

# Sarah G. Bishop

AFTER 18 YEARS OF WORKING IN PARTNERSHIP WITH NATIONAL PARKS, Partners in Parks came to a close in March 2006. We have greatly enjoyed creating educational opportunities in national parks for volunteers and students. We have worked with numerous National Park Service professionals, who have engaged our interest in and support for their work. Our volunteer and internship projects are notable. Several of our interns now work for the Park Service. We have achieved our mission to show national park managers how to engage students and volunteers in research and preservation projects. In the following pages is our history and a tutorial on how we developed and managed internships, our most important contribution to national parks. We hope you will benefit from our experience.

### Part One: A brief history of Partners in Parks

I have had a passion for national parks since 1967. I joined and eventually became president of the Cave Research Foundation, which was exploring, mapping, and conducting research in Mammoth Cave National Park and four other cave parks under a national agreement signed by the NPS director. This was a sweet deal for the all-volunteer foundation and for the parks. We cavers got to work in some of the most exceptional caves in the country; the managers of the parks received excellent maps, credible research reports, and other assistance. This partnership model should work in other parks.

The concept of Partners in Parks. In September 1987, I met with NPS Director William Penn Mott to present Partners in Parks. The initial concept was to create a small office at NPS headquarters to develop private-sector partnerships with individual parks in support of natural resource research and management projects. After consulting with other NPS managers, I decided that making Partners in Parks a private non-

profit organization was more practicable.

In January 1988, I presented Director Mott with a new vision of Partners in Parks. Working in partnership with the Park Service, it would meet special needs of the national parks and objectives of private-sector professionals by: (1) establishing longterm partnerships in specific parks involving multiple projects, (2) establishing shortterm projects, (3) assisting existing volunteer organizations, (4) organizing volunteer groups to work on major NPS objectives, and (5) encouraging donation of professional services. Director Mott turned to Carol Aten, director of the NPS Policy Office, who was part of our meeting, and said, "Help this lady become successful." And she did, in many ways.

Getting started. During our first three years, we met with numerous park managers, searching for a common understanding of research and resource management needs that would attract competent volunteers. At the same time, we were challenging these same managers to be comfortable with the concept of someone outside their staff doing serious work in their park. Partners

for resource management seemed attractive. The concept of research partners was not.

Our initial objective was to develop an enthusiasm among park managers for partnerships. Then we could introduce resource management partnerships with supervised volunteers at receptive parks.

Our first product was a manual about creating partnerships, which we presented at an NPS training workshop. We published a revised version for resource managers on military installations. We presented workshops based on these manuals six times between 1991 and 1995. Other publications included case studies on biosphere reserves, a videotape and handbook on archaeological site monitoring, another videotape and manual on using volunteers for exotic plant control, and guidelines for helping park staff and friends groups work well together.

For a few years we engaged members of the Arnold Air Society, the Air Force Reserve Officer Training Corps honor society, in resource management projects in six national parks. Some groups were more productive than others. We were beginning to learn how to help parks form good partnerships.

The year 1994 saw the beginning of our relationship with the NPS American Battlefield Protection Program. (See below for more details.) Again, some projects were more successful than others and so we learned more about appropriate ways to assist national parks.

**Developing our abilities.** We capitalized on what had worked best in developing partnerships. We applied that knowledge to new projects in different subject areas and locations. We increased the size of our Board of Directors, developed new sponsors, and moved the main Partners in Parks

office to Colorado. In 1997, we elected Carol Aten as chair of the Board. She and her successors, Michele Frome, David Kikel, Peter Brinkley, and Elliot Gruber, gave the organization good, independent leadership, allowing me, the president, and my staff to focus on building our programs and projects.

Our most productive years began with the new century. Two grants allowed us to explore fund-raising and marketing practices. The NPS continued to support our battlefield program. The National Fish and Wildlife Foundation and two other foundations awarded grants for a new project at Zion National Park. Several local organizations supported herpetological studies and other volunteer projects in Rock Creek Park and at other sites in the National Capital Region. We had projects in a sufficient number of states to be eligible for Combined Federal Campaign support.

We initiated a senior scientists' program in the National Capital Region and placed talented folks in several parks. Their work was outstanding and highly praised, but our program was short-lived. A new organization, the Environmental Alliance for Senior Involvement (EASI), was created with significant funding from the Environmental Protection Agency. Partners in Parks turned its attention to opportunities for other age groups.

**Gaining focus.** From these developments, two new ventures emerged: a long-term volunteer partnership at Zion, and an internship program to expand our battle-field program.

A model volunteer partnership. Beginning in 1999, we planned and raised funds for an exotic plant control and public education project at Zion. We hired a project manager to recruit and organize Zion

Partners, a volunteer group, and to manage the project until Zion Partners was able to do that on its own. The volunteers set to work collecting and propagating native seed, managing the greenhouse, removing non-native plants, restoring native habitats, developing native plant gardens at local schools, helping develop and present a native plant curriculum for fourth graders, and participating in joint ventures with local conservation groups on adjacent public lands. Of particular note is the Children's Garden at the Kiln Heritage site on the Dixie National Forest. Zion Partners helped elementary students draw and mount illustrations of native plants along a nature trail at the site (Figure 1).

This was the ideal volunteer partnership. Funding was adequate to get it started. The local project manager worked well with park staff (the superintendent was his neighbor) and successfully recruited volunteers of all ages and capabilities. Park staff established projects that needed to be done

Figure 1. Trail sign in Children's Garden, Dixie National Forest—a Zion Partners project.



and taught propagation methodology. A teacher who joined Zion Partners persuaded her principal to have the group create a native plant garden at the school and develop a curriculum around it. Many volunteers participated in projects just a few times, while a core group continues to manage the park's greenhouse and native plant nursery.

An introduction to internships. In 1998 we teamed up with the National Parks Conservation Association to design and manage the first two years of a battlefield internship program. Our first 12 collegelevel interns were mentored by park staff at four Civil War sites and one Revolutionary War site in Virginia and North Carolina. Although our volunteer projects were successful and satisfying, it soon become clear that Partners in Parks' greatest contribution to national parks would be through its internship programs. While personal reasons brought Partners in Parks to the town of Paonia in western Colorado, the opportunity to focus on park needs in the very diverse Intermountain Region was extremely attractive. It ultimately proved most fortuitous in developing our successful internship models.

Focus on internships. As a small non-profit, Partners in Parks either had to become larger to maintain a diversity of programs, or concentrate in one area. We decided to concentrate our programs and projects in the Intermountain Region, with a preferred focus on developing intern projects. We maintained a national presence with our battlefield interns program. Partners in Parks intern programs were designed to appeal to a culturally diverse student population. We recruited from colleges and universities that supported many different types of students. We insisted that all our interns receive a stipend, modest

though it may be, so that students of lesser economic means would have an opportunity to participate.

Battlefield internships program. Partners in Parks had a 12-year partnership with the American Battlefield Protection Program (ABPP). We started out helping park friends groups and then moved on to managing interns. During the final two years of our most satisfying relationship, we operated as a national partner under a cooperative agreement. While the ABPP grants and subsequent cooperative agreement precluded our working inside national parks, we found lots of opportunities to work on adjacent lands of importance to the parks.

Partners in Parks placed highly skilled interns at significant battlefield sites across the country. By the end of 2005, Partners in Parks had supported 31 interns at 18 battlefield sites in 12 states. Intern projects included producing nine National Register nominations, statements of significance, or related research; three community outreach projects; two interpretation-related projects; and surveys of boundaries, natural features, cultural/historic features, adjacent lands, and species. All but one of the projects were completed and considered highly successful.

Mesa Verde National Park internships. In 2001, Partners in Parks established an internship program with Fort Lewis College and Mesa Verde National Park. Four interns were placed in the park in 2002. By the end of 2005, the program had supported 30 interns in four years. Partners in Parks' internship program provided exceptional educational opportunities for Fort Lewis College's most talented students, while helping Mesa Verde meet unmet needs in its archaeological site con-

servation program and related programs through professionally supervised internships. We were particularly interested in recruiting Native American students whose cultural connection with the park may enrich both their experience and that of their park mentors.

Master's degree fellowship program. In 2003, with Partners in Parks' assistance, Glen Canyon National Recreation Area received Department of the Interior Community Conservation Initiative (CCI) funding. The park received a project continuation grant in 2004 before the CCI program lost its appropriation. These funds supported thesis work for two master's degree fellows at Northern Arizona University. For Partners in Parks, supporting fellowships was a logical extension of supporting internships.

# Part Two: Tutorial on successful internships

Partners in Parks has designed and managed three models for internships. The battlefield internship model featured many parks working with interns from many schools. Usually one intern was placed with one park. A few parks managed several interns over time. The Mesa Verde internship model involves one school located near the park with a group of interns working in the park. The internship program is now beginning its fifth season. The master's degree fellowship model supports a student conducting thesis research over a period of 18 months in the park.

Battlefield internship program. The program goal is to provide career-enhancing internship opportunities to talented graduate and upper-level undergraduate students in national parks and related areas with battlefield themes. They are paid posi-

tions, for which interns are strongly encouraged to seek academic credit. Students are selected through a competitive process. They are mentored by park staff during the course of their internships, and report to a faculty advisor for academic requirements. The program was funded under a cooperative agreement with the ABPP.

Partners in Parks' battlefield internship program placed students with course work in the area of the internship project at battlefield sites around the country. Park staff prepared project descriptions that included student eligibility criteria, such as academic level, major, specific courses taken, physical challenges, and any other special requirements. The intern project stated a goal that could be completed within a single 400hour internship. If it was an on-going project, then specific objectives were established that could be met in one internship. We looked for a staff member who was available, capable and willing to mentor the intern. Because of their academic level, and the nature of the projects, most interns needed little supervision.

We prepared a job announcement and advertised our internship positions through our website, elsewhere on the Internet, and through college and university departments and intern placement offices. We recruited at colleges and universities with majors in the internship subject area that were located near the project. Interested students applied to Partners in Parks.

We reviewed the applications and sent the best qualified to the park for selection. Partners in Parks hired the intern with an employment agreement that was signed by all concerned parties. It describes the project, the intern's relationship with the park and Partners in Parks, arrangements for payment of stipends and expenses, and worker's compensation and tort liability insurance coverage.

We strongly encouraged all our interns to seek academic credit for their work. The interns are responsible for making the appropriate arrangements with their college or university. The park mentors assure the credit-worthiness of the project and that the intern's work was well done.

Under our cooperative agreement with ABPP, we encouraged more parks to submit project ideas than we had funds to support. With a high probability of a yearly obligation of new funds, we were confident we would eventually meet everyone's needs, which we did.

Our interns worked full- or part-time for 400 hours over a period of 10 to 20 weeks, and received a \$3,400 stipend. We also provided housing and travel allowances as may needed and as funds allowed. Any other project expenses or needs, such as copying or postage, access to computers, etc., were supported by the park or by us. We paid the stipend and expenses in three installments upon receipt of progress and expense reports and time logs. As each internship was completed, Partners in Parks provided a copy of the final report and other products to ABPP, along with a financial summary.

Mesa Verde internship program. The program goal is to provide career-enhancing internship opportunities to talented upper-level undergraduate students from Fort Lewis College at Mesa Verde National Park. The internships are regarded as the capstone of a student's academic program. These internships are paid summer positions, which receive academic credit. Students are selected through a competitive process. They are mentored by park staff during the course of their internships, and

report to a faculty advisor for academic requirements. The program was funded by the Colorado State Historical Fund, Fort Lewis College Foundation, Mesa Verde National Park, the Mesa Verde Museum Association, and others.

The first step in pursuing this type of internship program is to secure funding. Partners in Parks successfully competed for Colorado State Historical Fund matching grants over a period of three years. The park's summer-hire funds and support from the college's foundation provide the majority of the required match.

The yearly process for recruiting and placing interns began in the fall. Project descriptions were presented to the designated college administrative partner (a dean at Fort Lewis College) and college faculty so that they might start developing interest among their students to participate in the program. If a project generated interest among qualified students and if funds were available to support it, it would go forward the following summer. The ideal intern is one who has completed the junior year with a high grade point average and with sufficient course work completed in the subject area of a project. Faculty encouraged younger students to plan their academic study to make them eligible later on. An intern fair was held in early February. College faculty advertised the event and encouraged student attendance. Park staff with potential projects attended and discussed their needs with and interviewed interested students. Potential interns prepared an application indicating which projects they were interested in. College faculty and the dean reviewed the applications, sending those that merited further consideration to park staff. Park staff prepared a list of students who they would like as

interns. Further interviews were arranged as necessary.

To encourage the most qualified students to apply for the internship program, two named internships have been established. The Robert and Florence Lister Internship recognizes an outstanding student who has demonstrated a strong interest in historic preservation. The Raymond Begay Internship will recognize academic excellence. To be sure these high standards are met, the named internships are awarded only when there are truly worthy students.

Partners in Parks hired the intern with an employment agreement that was signed by all concerned parties. It describes the project, the intern's relationship with the park and Partners in Parks, arrangements for payment of stipends and expenses, and worker's compensation and tort liability insurance coverage. We also prepared and updated yearly an intern handbook, which describes the overall program, its history, expectations of interns, and a description of Partners in Parks.

The interns met as a group in April at the college to orient them to what is expected of a participant in the Mesa Verde internship program. They must be registered for the summer internship course. Early in May the interns met as a group at the park to get acquainted with their mentors, talk about park rules, learn how to find their mentor or work station, and decide on travel and lodging arrangements. Two weeks of orientation—the same as is given to seasonal interpreters—are required.

Each intern had a park staff mentor. How closely the two worked together depended on the nature of the project. Interns working in backcountry survey crews were closely observed. Those who might be collecting information from the archives for a new publication worked more on their own.

It is ideal for interns to begin and end their projects on the same schedule. Mesa Verde designated one camping area at discounted rates for volunteers and interns. The interns were encouraged to camp during the work week to save on travel costs. A very nice benefit was that the interns got to know each other better and learn about their projects. Halfway through the internship, the students presented a progress report to each other, their park mentors and other senior staff, college faculty, and the program administrator. This is probably the high point of the internship experience.

Although the program administrator is the principal administrative partner, the college and the park also have project administration responsibilities. The academic partner's primary responsibility is assuring the credit-worthiness of the park projects and the academic preparation of the prospective interns. The college faculty supervises the interns, assigns grades, and evaluates the program annually. The park selects and manages the projects and interns. Mesa Verde made clear that its responsibility was to mentor the students, not supervise them. Because the interns were not employees of the park, this distinction is probably important. Partners in Parks and Mesa Verde National Park signed a cooperative agreement that allowed the park to obligate its intern and summer-hire funds to Partners in Parks. As Partners in Parks interns, they received the same \$3,400 stipend and money for expenses, regardless of the source of funds. Neither the park nor the college were burdened with hiring the interns. Partners in Parks considered its interns independent contractors, and provided them with an Internal Revenue Service Form 1099 as a report of earnings. Our uncomplicated approach to dealing with the economics of interns saved the other partners time and money.

As the provider of the funds that supported the internship program, Partners in Parks required assurance of the quality and completeness of the projects. The interns received partial payments twice during their project. They received their final payment when their park mentor and faculty advisor each approved the product of their internship.

When the interns completed their work, they submitted it to their mentor. The mentor reviewed and evaluated the quality and completeness of the report, asking for corrections or some further work as needed. Except for grammatical corrections, and sometimes the need for greater detail, intern final reports were usually well received. The close working relationship they had with park staff all but guaranteed a high-quality product. The mentors sent the intern reports and their evaluation to the faculty advisor and the program administrator. The faculty advisors sent their comments and approval to the program administrator and the interns received their final payment.

Partners in Parks collected program evaluations from the interns, park staff, and faculty advisors. These evaluations have proved helpful in solving logistical problems and program-related difficulties. One example was establishing a single start date for the summer internships and encouraging camping. The interns benefited from peer support. Another example was sending all the interns to the orientation training for seasonal interpreters. All had the same understanding of Mesa Verde National Park and what was expected of them.

Partners in Parks sent a final program

report to all entities that had funded the program. The final step is an early fall meeting when the program administrator, college faculty and dean, and park staff meet to review the previous internship season and plan the next year's projects.

Master's degree fellowship program. The purpose of this program is to provide a research fellowship opportunity within a national park for a master's degree student. As part of the agreement with the park, the student will accomplish a related resource management objective.

We began a fellowship project at Glen Canyon National Recreation Area with two consecutive CCI matching grants, which were obligated to Partners in Parks to administer under our NPS cooperative agreement. Partners in Parks helped draft the first application. We raised funds from Utah foundations and worked with park staff to arrange for in-kind support from volunteer groups. Other in-kind matches came from a partner university in the form of overhead foregone and the value of the fellow's faculty advisor supervisory time.

The project was to remove ravenna grass and a non-native crayfish from a side canyon as the first steps toward recovering the natural habitat. The research part of the project was to determine the appropriate methodology for accomplishing habitat restoration. Two successive master's degree students were recruited to conduct their thesis research under the supervision of a park staff member—the principal investigator—and the students' thesis advisor.

Partners in Parks advertised the initial research fellowship opportunity among the three Cooperative Ecosystem Studies Units in the NPS Intermountain Region and one in the Western Region. The NPS research coordinator at Northern Arizona University

(NAU), which happens to be the closest graduate university to the park, helped us find candidates. We transferred funds to the university to pay for the students' stipend and project-related expenses, half of their tuition, health care and benefits, and partial overhead expenses of the university.

The park program officer and the faculty advisors of the candidates for the fellowship determined the eligibility and suitability of the research fellows. Partners in Parks requested a formal application from the candidates and then awarded them a fellowship to be administered by NAU.

Partners in Parks' role in the project after helping recruit the initial fellow was strictly financial. We functioned as a pass-through for the federal grant, sending the money to NAU, which was the employer of record for the student. Partners in Parks' financial agreement was with the Office of Grant and Contract Services at NAU. This office has to confirm that the agreed-upon in-kind match from the university is met. We raised funds to support our costs for being a partner in this project.

The program manager at Glen Canyon had the first-line responsibility for supervising the student's work. He ensured that park staff knew what the student was doing and when and where he was in the park. The program manager reviewed and approved all progress reports and other project products. He also served on the second student's thesis committee. The student's faculty advisor closely monitored project work from an academic point of view. He also ensured the student was paid monthly, and kept track of expenses.

The student's research report is submitted to the park program manager for approval. It forms the basis of his master's thesis, which his thesis committee approves. The park program manager and the student's faculty advisor work together to assure the project has met agreed-upon objectives and that the resulting report meets park and academic standards. This communication is greatly facilitated when the program manager serves on the student's thesis committee. Partners in Parks has the responsibility for assuring all project funds are properly spent and all matching requirements have been met.

#### Passing the Partners in Parks torch

Early on in our partnership venture with national parks, I was asked, "What are you doing that the parks cannot do for themselves?" The answer, then as now, is "Nothing." There is nothing magical about finding interns or volunteer partners to do substantive research and preservation projects in parks. It just takes a commitment to do so and a willingness to do the preparation, administration, supervision, and follow-up that will be necessary.

Look at the program and project examples above. What fits your needs? Design good projects that are not complicated. If they have multiple objectives that can be met over time, then you won't be spending all your time designing new projects. Be sure senior park managers as well as the proposed staff mentor are strong supporters of interns or volunteers. Your partners need



Figure 2. "Most importantly, our crews gained a real morale boost from the enthusiastic responses the students had to the work we do." —Mesa Verde National Park archaeologist

to feel that what they are doing for the park is worthwhile, because it is.

Don't cut corners on financial support for interns. Stipends make it possible for students, who must earn money to attend college, to participate in a very valuable professional experience. Providing funds for travel or lodging expenses allows non-local students to participate.

Don't let the usual excuses stop you from starting an intern program. The rewards are too great to ignore. You get work done, the students receive invaluable professional experience, and the impact on your staff can be great (Figure 2).

# **Acknowledgments**

My thanks to everyone who has contributed to the success of Partners in Parks. I particularly want to recognize four groups: the *National Park Service*—too numerous to mention them all; *Board members*—Carol Aten, Peter Brinkley, Russell Cahill, Patricia Cahn, Robert Cahn, Richard Duesterhaus, David Fraley, Linda Frazier, Michele Frome, Elliot Gruber, T. Destry Jarvis, Joyce Kelly, David Kikel, Dominic Monetta, Loretta Neumann, Bertrand Phillips, Cleve Pinnix, Patricia Pride, Paul Pritchard, Richard Smith, Richard Spees, Bill Wade; *staff members*—Catherine Zachman, Richard Duesterhaus, and Michael Empey; and, *most especially*, Kathleen Hunter and William Bishop.

# FOR OVER 25 YEARS,

the George Wright Society has been about one thing:

# KNOWLEDGE FOR PARKS.

The heart of the GWS is our support for professions that promote science, scholarship, and understanding in parks, protected natural areas, historic places, and cultural sites. We bring it all together in ways nobody else does. If you care about parks, won't you please join the GWS community of professionals? Membership includes a subscription to *The George Wright Forum* and discounts at the biennial GWS Conference. Use this form or join on-line at www.georgewright.org.

name
affiliation
address
city, state/prov, zip/postal code
work phone; work fax
email
expertise (name up to 4 areas)
regular \$55/yr (\$65*) supporting \$150/yr (\$160*)
institution \$110/yr (\$120*) life \$1,000 (\$1,000*)
full-time student \$25/yr (\$25*) library subscription \$55/yr (\$65*)
* Prices marked with an asterisk apply to addresses outside of North America. Library subscriptions are available
to libraries only, and include a subscription to The George Wright Forum only (no additional membership benefits).
check enclosed please charge my Visa / MasterCard / AMEX
card number
expiration date (MM/YY) 3-digit security code (back of card)
signature
MAIL TO: George Wright Society, P.O. Box 65, Hancock, MI 49930-0065 USA

>>>>>> thank you!

or FAX TO: 1-906-487-9405



P. O. Box 65 Hancock, Michigan 49930-0065 USA

www.georgewright.org

Dedicated to the Protection, Preservation, and Management of Cultural and Natural Parks and Reserves Through Research and Education