To provide a Council perspective, Tom McCulloch and Alan Stanfill, who represented the Council as the discussants at the workshop in Austin and the symposium in Seattle, offer a discussion of the case studies at the end of this volume. The projects and programs included in this issue are excellent examples of how federal agencies, State Historic Preservation Officers, Indian tribes, historians, and archeologists can work together with other interested persons to achieve effective historic preservation outcomes. Other good examples exist, but we hope those presented here will inspire readers to think creatively when faced with similar challenges to the preservation and long-term management of archeological and historic resources.

Carol Gleichman and Jane Crisler are historic preservation specialists with the Advisory Council on Historic Preservation, Office of Planning and Review, Lakewood, Colorado. They were the guest editors for this issue of CRM.

Kris Mitchell is a historian with Mason Hanger Corporation, Amarillo, Texas.

The Advisory Council on Historic Preservation is an independent federal agency that advises the President and Congress on historic preservation and reviews federal undertakings that may affect historic properties in the United States. Visit the Council's web site <http://www.achp.gov>.

Fred Chapman

The Bighorn Medicine Wheel 1988-1999

In the fall of 1988, the Bighorn National Forest introduced plans for access road and facility improvements at the Medicine Wheel National Historic Landmark (NHL) in order to accommodate increasing tourism. During a field consultation with Forest Service personnel, Northern Arapaho traditional elders expressed concerns that the proposed construction would disturb or possibly destroy the spiritual life that surrounds the Medicine Wheel. The elders later recounted how a federal official advised them that the Forest Service could "bulldoze the Medicine Wheel" as long as the agency followed certain undisclosed regulatory procedures.[1] This notorious incident marked the beginning of years of intricate negotiations and chronic acrimony between federal, state, and local government agencies, the general public, and Native American traditional elders representing 16 Indian tribes. What began as a straightforward federal undertaking turned into Wyoming's most complex and protracted Section 106 case. Viewed retrospectively, the Medicine Wheel was a watershed historic preservation event in the Northwestern Plains that decisively changed the practice of public archeology in Wyoming by demonstrating the benefits and necessity of Native American consultation.

Prehistoric and Ethnohistoric Context

The Bighorn Medicine Wheel NHL is located at an elevation of 9,642 feet near the crest of the Bighorn Mountains of north central Wyoming. It occupies a high, alpine plateau about 30 miles east of Lovell, Wyoming. The Bighorn Medicine Wheel is the type site for medicine wheels in North America. Between 70 and 150 medicine wheels have been identified in South Dakota, Wyoming, Montana, Alberta, and Saskatchewan. Most are found in southern Alberta and Saskatchewan. The oldest medicine wheel is the 5,500-year-old Majorville Cairn in southern Alberta.

The most conspicuous feature of the Landmark is a circular alignment of limestone boulders that measures about 80 feet in diameter and contains 28 rock "spokes" that radiate from a prominent central cairn. Five smaller stone enclosures are connected to the outer circumference of the Wheel. A sixth and westernmost enclosure is located exterior to the Medicine Wheel but is clearly linked to the central cairn by one of the "spokes." The enclosures are round, oval, or horseshoe-shaped and closely resemble Northern and Northwestern Plains vision quest structures described by several researchers over the past 30 years. The surrounding 23,000-acre study area contains approximately 44 historic and prehistoric sites that include tipi rings, lithic scatters, buried archeological sites, and a system of relict prehistoric Indian trails all superimposed by a century of non-native use by loggers, ranchers, miners, and recreationalists.

The study area also contains 14 contemporary Native American traditional use areas and features. These include ceremonial staging areas, medicinal and ceremonial plant gathering areas, sweat lodge sites, alters, offering locales and vision quest enclosures. Many of these traditional use areas coincide with prehistoric sites containing problematic rock alignments that probably relate to early ceremonial or spiritual use. An accumulating body of ethnographic evidence collected over the past five years demonstrates that the Medicine Wheel and the surrounding landscape is and has been a major ceremonial and traditional use area for many regional Indian tribes. Contemporary traditional Arapaho, Bannock, Blackfeet, Cheyenne, Crow, Kootenai-Salish, Plains Cree, Shoshone, and Sioux, generally venerate the Medicine Wheel because it embodies uniquely important and powerful spiritual principles that figure prominently in tribal, family, and band-specific oral and ceremonial traditions. To many Native Americans, the rock alignments and cairns that make up the Medicine Wheel represent religious architecture rather than archeological data. It is probably fair to say that most knowledgeable Indian religious practitioners regard the Medicine Wheel as an essential but secondary component of a much larger spiritual landscape composed of the surrounding alpine forests and mountain peaks.

One of the earliest photos of the Medicine Wheel, taken in 1916 by H. H. Thompson, shows a Crow Indian named Cut Ear praying at the eastern end of the Wheel. Photo courtesy Wyoming Division of Cultural Resources.

Professional researchers generally believe that the Medicine Wheel is a Late Prehistoric composite feature that was constructed over a period of several hundred years. Twelve ceramic sherds were recovered from the eastern half of the Medicine Wheel during fieldwork conducted by the Sheridan Chapter of the Wyoming Archaeological Society in 1958.[2] Originally identified as Shoshone pottery, two of the sherds were subsequently identified as Crow.[3] The 1958 fieldwork project also produced nine early-19th-century glass beads found near the central cairn,[4] a wood sample from one of the cairns that was tentatively dated to 1760 A.D. by means of dendrochronological techniques, and a 4,400-year-old projectile point that was reportedly encountered beneath the central cairn structure.[5]

Four hearth charcoal samples recovered from within 400 yards of the Medicine Wheel have produced dates ranging from the modern era (post 1950) to 6650 B.P. At a multi-component site located in the upper Crystal Creek drainage basin approximately three miles southeast of the Medicine Wheel, charcoal and wood samples yielded dates ranging from 1450 B.P. to about 980 B.P. This limited radiometric data suggests that prehistoric occupation and use of the general study area occurred mainly during the first half of the Late Prehistoric Period. However, most datable archeological materials found in close proximity to the Medicine Wheel itself date to the latter half of the Late Prehistoric Period. Although these diagnostic artifacts and radiocarbon dates fail to decisively explain the construction and use of the Medicine Wheel, the evidence clearly indicates that the study area was used by prehistoric Native Americans for nearly 7,000 years. Whether or not this prehistoric occupation and use were predominantly oriented toward ceremonial or spiritual use—with the Medicine Wheel as the central focus—is a speculative issue that archeological data probably won't be able to resolve. In this regard, Michael Wilson's comments are especially pertinent. He notes the tendency of researchers to "...elevate the Medicine Wheel to the position of shrine..."[6] by overlooking the numerous sites that express the more mundane activities of hunting and camping. He also suggests that to fully comprehend a site like the Medicine Wheel "...probably requires a world view in which the secular/religious dichotomy simply does not exist."[7]

Assigning tribal affiliation to the Medicine Wheel by archeological means is a matter of inference rather than fact. As mentioned previously, ceramics recovered from the interior of the Medicine Wheel have been identified as Crow and Shoshone in origin. Frison and Wilson comment that there is a great deal of archeological evidence

supporting an extensive Crow presence on the western slopes of the Big Horn Mountains beginning in the latter part of the 16th century or possibly earlier. During this Late Prehistoric Period, evidence for a substantial Shoshone occupation can be seen in the western Big Horn Basin rather than in the Bighorn Mountains. Finally, it is important to note that horseshoe-shaped enclosures like those found in direct association with the Medicine Wheel have been associated with the Crow Indian fasting (vision quest) ritualism.

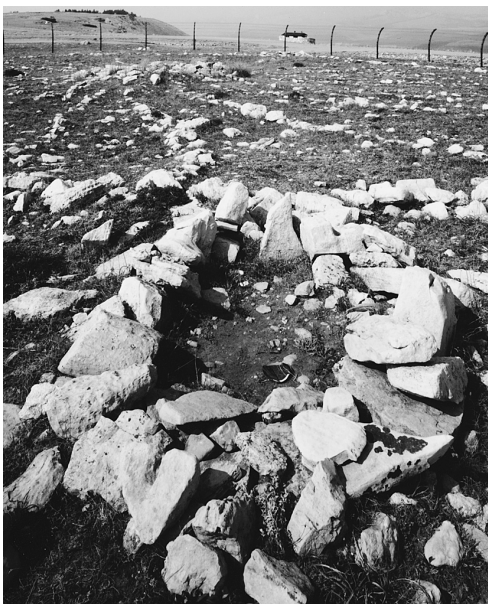
Administrative History

Efforts to memorialize the Medicine Wheel began in 1915, when the National Park Service recommended to the Secretary of Agriculture that the site should be designated a national monument. In 1956, in response to a rumor that the federal government intended to relocate the Medicine Wheel to a more accessible elevation, Wyoming governor Milward L. Simpson requested assurances from the National Park Service and the U. S. Forest Service that the "Indian Medicine Wheel" would not be moved. Federal authorities responded in June of 1957, when the Forest Service formally withdrew the Medicine Wheel and the surrounding 120 acres "...from all forms of appropriation under the public land laws, including the mining and the mineral-leasing laws...." Due to the influence of several locally prominent officials, efforts to formally commemorate the Medicine Wheel were renewed in the 1950s and the required supporting documentation was compiled in the 1960s. In recognition that the Medicine Wheel was "...the largest and most elaborate Indian structure of its type," the site was designated a National Historic Landmark in September 1970 by Walter J. Hickel, the Secretary of the Interior at that time.

As mentioned previously, in 1988 the Forest Service proposed changes designed to accommodate and encourage tourism at the Landmark. The preferred development alternative included the construction of a large parking lot, a viewing/photography tower, and a modest visitor center all within about 100 meters of the Medicine Wheel. Public response was revealing. The Native American community circulated a petition that asked the Forest Service to recognize the Bighorn Medicine Wheel as an important Native American religious site, allow Indian people 12 days a year to conduct ceremonies at the Wheel, and prohibit new construction within one-half mile of the Landmark. Eventually, 659 signed petitions were submitted to the Forest Service. Commentary from the local community was often racist in nature. Rather than addressing the preferred construction alternative, much of the commentary vilified Native American involvement and motives. An influential former state senator from Big Horn County stated publicly that "...the ceremonies conducted by Indians might be an attraction for tourists." A growing assembly of cultural resource advisory agencies and natural resource advocacy organizations uniformly opposed the planned construction activity on the grounds that it would seriously impact the values that contributed to the significance of the cultural landscape that included the Landmark. The Forest Service was dismissive and responded by insisting the preferred alternative would not significantly affect the archeological values on which the 1970 NHL designation was based. In a public comment analysis published by the Forest Service in 1989, the 659 Indian petitions (which represented 85% of all public comment) were counted as a single response. The battle lines were now clearly drawn.

By 1990, it had become apparent to most interested parties that the Forest Service's inability to reach a public consensus concerning the management of the Medicine Wheel was profoundly influenced by the fact that the archeological and ethnohistoric parameters of the Medicine Wheel were not well known. Although the Medicine Wheel had been studied by numerous professional researchers beginning in 1903 with S. C. Simms of the Chicago Field Museum, no comprehensive effort had ever been made to synthesize the existing data. Further, ethnohistoric and ethnographic information concerning the use of the Wheel by Native Americans had never been compiled. Based on fieldwork conducted by Wilson, Reher and Wedel, Laurent, and Reeves, it was clear that the Medicine Wheel was merely part of a much larger cultural landscape containing numerous archeological and ethnographic localities. Although initially opposed by the Forest Service, the involved government agencies eventually agreed to cooperatively sponsor and produce a NHL boundary revision study designed to establish boundaries encompassing all historic, ethnographic, and archeological sites associated with the cultural landscape that included the Medicine Wheel. In 1991, the Wyoming State Historic Preservation Office (WYSHPO) awarded a $15,000 matching grant to the Medicine Wheel Coalition, a prominent Native American advocacy organization, to begin the collection of pertinent ethnographic information regarding tribal use of the Medicine Wheel and surrounding landscape.

Throughout the early 1990s, the Forest Service committed a number of miscues that severely undercut their credibility in the eyes of the Native American community. The Bighorn



Fasting (vision quest) enclosure, Bighorn Medicine Wheel. Photo by Richard Collier, courtesy Wyoming Division of Cultural Resources.

National Forest Supervisor, in a generous overture of support for Indian religious practices, administratively designated a staging area for Native American use near the Medicine Wheel. Unfortunately, agency cultural resource specialists were not consulted beforehand, and the designated area was later found to coincide with a prehistoric site containing numerous surface features and subsurface cultural deposits. The Forest Service rescinded the administrative action.

The Forest Service later scheduled a series of open house events intended to solicit public input and participation concerning various management proposals for the Medicine Wheel. An open house was scheduled for Riverton, Wyoming, which adjoins the Wind River Indian Reservation, home to the Northern Arapaho and Eastern Shoshone tribes. Forest Service officials expressed disappointment that no Native Americans attended the Riverton open house and concluded that there was little real interest in the Medicine Wheel within the Indian community. Only later did the Forest Service discover they had scheduled the open house during the Arapaho and Shoshone sundances—a time when traditional Native Americans are least likely to participate in any event not related to the sundance.

By 1993, increasing visitation—which rose from 2,100 visitors in 1967 to approximately 70,000 visitors in 1992—was noticeably impacting the Medicine Wheel. In this regard it is important to point out that the Medicine Wheel is inaccessible to normal traffic for eight or nine months of the year due to snow cover. Consequently, visitation is concentrated during the three summer months. During the summer of 1992, the informal path that surrounded the Medicine Wheel became a 10”-12” rutted trail and the fragile alpine vegetation that normally covers the landscape had all but disappeared. In an apparent effort to emulate the Native American religious custom of leaving prayer flags and other religious offerings on the fence surrounding the Medicine Wheel, non-Indian visitors attached used cigarette lighters, fish hooks, belt buckles, condoms, tampons, and other inappropriate items to the fence. To historic preservationists, the physical impacts were alarming. To traditional Native Americans, the consequences of unregulated visitation at the Medicine Wheel constituted the worst kind of spiritual desecration.

With the physical integrity of the Landmark now undeniably and visibly at risk, the Forest Service finally acknowledged the necessity of finding viable solutions for the long-term protection of the Medicine Wheel. The bureaucratic response to these impacts was encouraging. The consulting parties, which by this time included the Bighorn National Forest, the Advisory Council on Historic Preservation, the Big Horn County Commissioners, the WYSHPO, the Medicine Wheel Coalition, and the Medicine Wheel Alliance, began slowly to work together more cooperatively. A series of interim agreement documents was executed that prohibited vehicular access and also provided for Native American spiritual use of the Medicine Wheel. Additional funding was secured to complete the ethnographic survey and the Forest Service hired an archeologist to compile and synthesize all archeological information relating to the study area.

In 1994, the consulting parties began work on a Historic Preservation Plan for the Medicine Wheel and vicinity. This difficult work proceeded slowly due to endless revisions, bureaucratic skirmishes, internecine warfare between contending tribal factions, and a deliberate strategy of delay later openly acknowledged by Forest Service managers. The resulting preservation plan and programmatic agreement, executed in September of 1996, were compromise documents that reflected the diverse and contending interests of the consulting parties. The document establishes a 23,000-acre “area of consultation” that encompasses all cultural resources associated with the Medicine Wheel. The preservation plan also facilitates traditional cultural use by Native American practitioners by providing for scheduled ceremonial use and allowing plant gathering in support of religious activities. Vehicular access is generally prohibited and replaced by pedestrian access, although exceptions can be made for disabled and elderly visitors. Livestock grazing and timber harvesting is restricted but not prohibited. The site will be carefully and systematically monitored for adverse effects using well defined baseline data collected in 1993. And finally, the historic preservation plan provides for the completion of a revised NHL nomination and stipulates that the NHL will be formally withdrawn from future mineral extraction activities.

Epilogue

In any battle there are casualties. The Medicine Wheel is no exception. Since 1988, the Bighorn National Forest has seen four Medicine Wheel District Rangers and three Forest Supervisors. Four of these managers resigned from the Forest Service and three were reassigned. By any measure, this is a high rate of upper management turnover. One District Ranger was asked to retire due to his unwillingness to work cooperatively with Native Americans and cultural resource advocacy organizations. The children of another District Ranger were harassed by schoolmates because of their "Indian loving" father. He was later reassigned after receiving anonymous death threats by phone. The Medicine Wheel probably played a key role in the departure of two others.

The Native American community most often sent their highest ranking traditional elders and medicine men to negotiate with the Forest Service concerning the Medicine Wheel. Between 1988 and 1996, six traditional elders who figured prominently in the Medicine Wheel saga passed away due to a variety of medical complications associated with old age. They include Anthony Sitting Eagle, senior traditional elder of the Northern Arapaho tribe; Vince Redman, principal Northern Arapaho medicine man; Bill Tallbull, a highly respected Northern Cheyenne elder probably best known to this audience as an appointed member of the Advisory Council on Historic Preservation and the NAGPRA Review Committee; Art Bigman, a prominent Crow elder whose great grandfather, Cut Ear, is featured in the 1916 H. H. Thompson photo (see page 6); and the Southern Arapaho chiefs Virgil Franklin and Alton Harrison.

There was at least one other casualty. In 1995, the WYSHPO Native American Affairs Program was effectively terminated due to efforts by state and federal managers to remove the State of Wyoming from the controversial arena of Native American Section 106 consultation. The WYSHPO consequently withdrew from active participation in the Medicine Wheel negotiations, but retained observer status. To the Native American traditional community the message was clear. If you were a white rancher, oil company executive, mine operator, or government bureaucrat, the WYSHPO would assist with historic preservation compliance issues—but not if you were an Indian.

Not all Medicine Wheel issues have been fully resolved. The Medicine Wheel boundary revision study, which was intended to establish National Historic Landmark boundaries that reflect both archeological and ethnographic values, is currently under attack by the logging industry, conservative advocacy organizations, Wyoming's congressional delegation, and local citizens who do not believe Native Americans have any legitimate cultural ties to the Medicine Wheel. What began as an effort to revise the boundaries based on objective criteria has now become an issue where politics, rather than facts, will likely determine the outcome.

Despite this discouraging prognosis, the "Battle of the Big Horn Medicine Wheel" includes an outcome that may more than compensate for the previously mentioned losses. Consultation between archeologists and Native American traditional leaders, subject to a set of unwritten protocols and etiquette developed during the Medicine Wheel negotiations, is now a more or less permanent fixture of the Section 106 landscape in Wyoming. Public archeology in the Northwestern Plains will never be the same.

In February 1999, Mountain States Legal Foundation filed suit against the Forest Service on behalf of Wyoming Sawmills, Inc. The suit was filed, in part, because the Forest Service suspended a timber sale to complete consultation with Tribes regarding the effects of logging truck traffic on the Medicine Wheel. The suit alleges that establishment of the Medicine Wheel Historic Preservation Plan and subsequent amendment of the Forest Plan violated a variety of federal laws and regulatory procedures, including the Establishment Clause of the First Amendment.

Notes

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Fred Chapman is the Senior Archeologist and Native American Liaison for the Wyoming State Historic Preservation Office in Cheyenne, Wyoming. He has worked for the Wyoming SHPO for 12 years.

Mike Andrews

The Shoshone Irrigation Project

Educational Exhibits as Mitigation

The Bureau of Reclamation of the U.S. Department of the Interior is responsible for the development and conservation of the nation's water resources in the Western United States. With its original purpose "to provide for the reclamation of arid and semiarid lands in the West," Reclamation set about to construct large irrigation systems, especially during the first half of this century. These irrigation projects played a significant role in the settling of the West.

Reclamation's history includes building large and impressive dams, many of which are listed in the National Register of Historic Places. In contrast, the irrigation systems which are fundamental elements of these projects are subtle and unspectacular to most people. In fact, some archeologists consider them so unremarkable as to not be worthy of evaluation. The necessity of historic preservation compliance for projects at the high-profile dams is rarely debated. However, it can be a challenge to comply with the National Historic Preservation Act for projects on the canals and ditches, especially if one wants to get beyond a cookbook approach. The Shoshone Irrigation Project in northwest Wyoming illustrates such challenges and one possible solution for their resolution.

Irrigation systems are dynamic systems. They require a great deal of periodic maintenance to be kept operational. Many of the system's components suffer from exposure to the elements: earthen walls erode, canal bottoms silt up, concrete structures are subject to freeze-thaw action, and wooden features deteriorate. As a result, constant vigilance is required to keep a system from quickly becoming inoperative. During this maintenance it is usually appropriate to replace deterio-