



**YELLOWSTONE  
CENTER FOR RESOURCES  
2006 ANNUAL REPORT**







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Yellowstone Center for Resources  
National Park Service  
Yellowstone National Park, Wyoming

YCR-2007-03



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*Photographs not otherwise marked are courtesy of the National Park Service.*

Cover photos: *center*, boreal toad at High Lake (NPS); *clockwise from top*, Matt Metz (foreground) and Rick McIntyre observe a wolf–wolf clash (NPS); a pygmy owl (Terry McEneaney); wagon and mules on Slough Creek (NPS); Nez Perce drummer at the 3<sup>rd</sup> annual Nez Perce pipe ceremony along the Firehole River (NPS).

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*Centaurea repens.*

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# Introduction

Yellowstone's unique geological and biological resources inspired its creation as the world's first national park in 1872. The National Park Service (NPS) is legally responsible for preserving, unimpaired, the park's natural and cultural resources and values for the enjoyment, education, and inspiration of this and future generations. The Yellowstone Center for Resources (YCR) works to fulfill these responsibilities for the resources we are mandated to manage and protect. The biggest change in the YCR during 2006 was the February retirement of Director John D. Varley, who had lead the division since 1993. In May, I was selected as the new YCR chief—big shoes to fill, indeed.

During 2006, bison and grizzly bear population numbers in the park were similar to 2005, the wolf population rebounded from a decline as a result of disease in 2005, and the northern Yellowstone elk population continued to decrease in number. More than 59,000 non-native lake trout were removed from Yellowstone Lake, bringing the total number removed to almost 200,000 during 1994–2006. The *Service-wide Benefits-Sharing Draft Environmental Impact Statement* was released for public comment to examine the issue of whether the NPS should share in potential scientific and economic benefits when researchers studying park resources discover or invent something commercially valuable from their research involving NPS specimens.

Almost 3,000 people used the Heritage and Research Center in 2006. Park archeological staff made two discoveries of stone used in prehistoric tools and their associated workshops that are changing how we view the movements of prehistoric peoples in the park. The Greater Yellowstone Science Learning Center was accepted into the national NPS Research Learning Center program, and YCR staff continued to develop the learning center website in cooperation with partners.

YCR's partnerships and agreements with other federal and state agencies, academia, and public organizations continued to be critical to our successes in stewardship. In 2006, the Yellowstone Volcano Observatory (a partnership between the park, the U.S. Geological Survey, and the University of Utah) published a 10-year monitoring plan for the Yellowstone Volcano. The YCR also continued to benefit from the hard work of many volunteers. Research Permit Office (RPO) staff authorized more than 200 research permits to investigators from across the U.S. and foreign countries.

For more information, readers may contact us at (307) 344-2203, visit the park's web site at [www.nps.gov/yell](http://www.nps.gov/yell), or visit the Greater Yellowstone Science Learning Center website at [www.greateryellowstonescience.org](http://www.greateryellowstonescience.org).



Tom Olliff  
Chief, Yellowstone Center for Resources

## PART I

# Cultural Resource Programs

The Branch of Cultural Resources helps preserve and increase knowledge of Yellowstone's resources in these areas:

- Archeology
- Archives, Library, and Museum Collections
- Ethnography
- Historic Road Rehabilitation
- Historic Structures
- Yellowstone History



*Nez Perce drummer at the 3<sup>rd</sup> annual Nez Perce pipe ceremony along the Firehole River.*

## Archeology

Archeology in Yellowstone National Park (YNP) is critical to understanding the precontact and historical record of the greater Yellowstone area. By studying the types of stone that were used and discarded, staff can track the early human residents as they lived and traveled in the park and beyond it. Because the intensity of use varies through time as environmental conditions become more or less favorable, the archeological sites and their contents also provide a means for interdisciplinary investigations of past climate and biotic change.

### Inventory

To prevent inadvertent damage to archeological resources, we worked with the Fire Cache to complete inventories in sites where hazard fuel reduction projects were planned near Norris Junction and Madison Junction.

As part of ongoing assessment efforts, we revisited 257 documented sites during the summer to obtain information about their current condition. We completed the fieldwork for the inventory of the south shore of Yellowstone Lake which is being funded by the Yellowstone Park Foundation and made progress on the report to be completed in 2007. Nearly 100 sites have been recorded between West Thumb and Trail Creek at the Yellowstone River delta. We also continue to add documented sites to the park's Archeological Sites Management Information System database, which now includes 1,467 sites.

## Stone Raw Materials

The park archeological staff made two discoveries of stone used in prehistoric tools and their associated workshops this summer that are enabling us to refine questions about the prehistoric use of stone resources in and around the park. The larger source is a 1.6-mile-long exposure of Absaroka Volcanics bedrock that contains seams, nodules, and pockets of cherts and chalcedonies. We distinguish between these two materials largely by whether the material is opaque or translucent. The areas with high silica concentrations show pouncing to knock off usable pieces and shallow excavations to follow veins of this material. The activity could be considered mining, which had not been previously identified for non-obsidian materials in the park. The areas around the local sources contain stone that was discarded. This raw material source varies broadly in color, including shades of brown, grey, red to pink, white, blue, and green. Some have inclusions of crystals or bands of different colors. We recognize stone with several unique color combinations from this source as occurring as artifacts in archeological sites along the Yellowstone River.

The second source, located near the Northeast Entrance, represents a large stone workshop that used chert cobbles found in the local gravels and probably also obtained from local limestone cliff mountains. This possibility is suggested by several large rockfall sections that contained chert nodules that could have been worked. The color of this material ranges from grays to off-whites.

These raw material source areas and the expectation that we will find more of them in the park is changing how we view the movements of prehistoric peoples in the park. Now we know they did not have to leave the park in order to obtain quality non-obsidian stone for tools. Other cherts were brought into the park by early visitors and more work is needed to distinguish between local and non-local materials. Unfortunately, cherts and chalcedonies cannot be as easily and inexpensively fingerprinted as obsidian is. We do not know the time period(s) during which these stone sources were used, but examination of artifacts from several Yellowstone River Canyon excavations could provide data relevant to this question.

### **Analysis of Artifacts Recovered Near Frying Pan Springs**

The final phase of analysis of the 50,000+ artifacts recovered from the excavation of a precontact campsite in the thermal area near Frying Pan Springs began in 2006. Physical, chemical, botanical, and geophysical analysis of the artifacts and geological data from the site was coordinated by the Office of the Wyoming State Archaeologist. Statistical analysis of the flake stone debris and some additional chemical analysis of the thermal soils will be completed in 2007 prior to drafting the final report. A highlight of the 2006 analysis was the protein residue analysis of selected artifacts conducted by the Laboratory of Archaeological Sciences, California State University, which revealed that people camped at this site 2,200 years ago had a varied diet of plants and meat and were using tools to process a variety of substances. Antiserum tests of the residues identified mountain sheep, bear, mountain lion (or bobcat), gallinaceous fowl (such as quail or grouse), deer, bison, beaver or porcupine, rabbit, and rats. Plant food residue included amaranth or pigweed, cactus, camas, wild onion, beeblossom, stinkweed, goosefoot, greasewood, pickleweed, and grasses. Pine and cedar residues were also identified on the tools, indicating that the people were using flaked stone tools to work wood and likely hafting stone points onto dart throwers (atlatls) using pine tar. Cultural resource staff presented information about the archeological data recovered from this site at the Plains Anthropological Conference in Topeka, Kansas.

### **Bannock Trail Clarification**

Volunteers Bob Flather and Mike Robinson, who have been researching early roads in the park for several years, have traced the 1879 Cooke City Mining Road from Mammoth to the Northeast Entrance. Their extensive research in the park archives turned up a 1906 map of the newly constructed highway and the nearby miners' road between Mammoth and Blacktail Deer Creek by the University of Illinois Civil Engineering Department. Comparing this map with the 1956 description of the Bannock Trail by Wayne Replogle's 1956 map shows that Replogle misidentified the Cooke City Mining Road as the trail. Further examination of where the trail is believed to be shows road cuts and other evidence that are incompatible with identification of an aboriginal trail. Investigations in 2000 on the west side of the park and in 2006 in the Gallatin Mountains also failed to identify traces of this trail. Archeologists agree Indians were using trails (perhaps game trails) in the park, but no evidence of aboriginal trails have been identified yet. Although the mythology associated with a Bannock Trail across the park is strong, it seems unlikely that there will be physical evidence to associate an aboriginal trail with the Bannock Indians. Consultation with the Shoshone-Bannock Tribes (see Ethnography section) may shed some additional light on this matter.

### **Nez Perce Trail**

With funding from the Yellowstone Park Foundation, we examined five locations where the Nez Perce were believed to have encountered tourists or to have camped during their flight across the park in 1877 (see Ethnography section). We were able to identify artifacts from that time period at four of the locations; however, only one area could be confidently associated with the Nez Perce. At other

*These rosettes were designed for an Army officer's bridle and were found where General O. O. Howard's horse herd probably grazed on the Yellowstone River in 1877.*





*Volunteer Robin Szamuhel on the large quarry site.*

locations we believe we found evidence of a camp of General O. O. Howard (who was chasing the Nez Perce) and of dude pack trips (Valley Ranch, Camp Trails, and maybe others) that were popular from the 1920s to 1940s. We gained valuable experience in getting to know the Nez Perce who participated in the inventory, becoming more familiar with the historical literature about their 1877 flight, and in clarifying the kinds of evidence and artifacts that the early sites could contain. This was a pilot project that will help us plan for a three-year inventory of the entire Nez Perce trail across the park beginning in FY08.

### **Development of an Archeological Field School**

Cultural resource staff worked with University of Montana professors to explore the possibility of an on-going archeological field school to inventory and document precontact and historical sites in the Montana portion of the park. The Rocky Mountains Cooperative Ecosystem Studies Unit in Missoula and the University of Montana provided the seed money to begin the survey in field season 2006. Cultural resource staff reviewed the research proposal and submitted funding requests to continue the field work during the 2008 season.

### **Public Involvement and Volunteer Support**

In addition to Bob Flather and Mike Robinson, five other volunteers greatly aided in the archeology program. Diane Hargreaves (Bozeman) cataloged artifacts and entered them into the NPS Re-discovery program. Robin Szamuhel (Alberta, Canada), John Reynolds (Virginia), and Stanford intern Brian Quinn worked in the lab when not in the field helping with field condition assessments and site documentation. Mary Meagher shared her knowledge of the park and assisted with backcountry inventories.

## **Archives, Library, and Museum Collections**

Yellowstone National Park's archives, library, and museum collections comprise more than 5.3 million items that document the cultural and natural history of the park, making them the second largest group of collections in the NPS. They include some of the first photographs taken of the park by William Henry Jackson; Thomas Moran's original field sketches from the 1871 Hayden Expedition; one of the most comprehensive collections of postcards, souvenirs, and ephemera of Yellowstone; and a rare book collection. The archives collection consists of nearly 3,000 linear feet of historic records that document the history of Yellowstone since its establishment in 1872, while the library contains more than 20,000 volumes related to Yellowstone's history, past and present.



*View of the rare book storage in the HRC.*

The goal of the archives and museum program is to properly preserve and document the park's cultural and natural history, and to make them available to as wide an audience as possible through on-site research, the Internet, facility tours, and temporary exhibits. The archival collection is one of nine affiliates of the National Archives and Records Administration (NARA), and the only one located in a national park. Because of this affiliation, the park retains permanent federal records on-site rather than transferring records to NARA records centers and facilities. In addition to federal records, the archives also includes donated historical records

and collections, records of park concessioners, and an extensive oral history collection. The archives and museum collections are heavily used by park staff and outside researchers studying all aspects of park history.

The primary objectives of the Yellowstone Research Library are to document the history of Yellowstone National Park by preserving all relevant books and papers, and to select, organize, and make accessible books and related materials that will assist park staff in the performance of their duties. Through the Wyoming Library Database (WYLD) of the Wyoming Library Consortium, the library also makes its resources available to the public; independent researchers; students; concessions employees; the local community in Gardiner, Montana; residents of the state of Wyoming; and park visitors.

### Collection Conservation

Through the Yellowstone Park Foundation, the Mercer Endowment provided funding for a photograph conservator from Harpers Ferry Center to spend two weeks in Yellowstone assessing the condition of the park's photograph and film collection. Theresa Voellinger examined an extensive sample of the 90,000-item collection, including the archives film collection, and provided hands-on training for staff in humidifying and flattening photographs and oversized maps and documents. To help ensure that the pieces most at risk receive the proper conservation treatment with minimum loss of historic fabric, her report included recommendations on treatment proposals for the more at-risk items and storage improvement.

### Assisting Researchers

The archives served 251 on-site researchers (including 118 NPS employees) during 2006 as well as responded to 321 telephone, e-mail, and written research requests. The library assisted 1,065 on-site patrons and answered almost 250 reference requests by phone and e-mail. Of the on-site researchers, 239 were NPS staff, which represented a 70% increase in use by park personnel over 2005, the year the library was closed for an extended period during the move to its new location in the HRC. Museum staff assisted approximately 100 researchers with photograph requests, which resulted in the scanning of more than 800 images. A researcher with Ken Burns's

Florentine Films returned in 2006 and requested 350 images in addition to the almost 500 requested during 2005 for Burns's upcoming documentary on the National Park Service.

### Internships and Volunteer Support

The internship program with Montana State University (MSU) and Stanford University continued for its second year, with eight interns completing 4,810 hours of project work with the history, museum, archeology, and ethnography programs during summer 2006. Interns working with the museum program assisted with the planning and installation of a temporary exhibit at the HRC entitled "Yellowstone Through the Decades: 1890s–1960s." Plans were finalized to enlarge the program in 2007 by bringing in MSU students to work during the winter season on critical projects such as backlog cataloging and object rehousing.



*Theresa Voellinger, photograph conservator from Harpers Ferry Center, teaches HRC staff how to create a hydration chamber to assist with flattening rolled photographs and documents.*



*View of the HRC main lobby and part of the temporary exhibit, "Yellowstone Through the Decades: 1890s-1960s," installed during the summer of 2006 by MSU and Stanford interns.*

The Community Docent Program was enlarged from 3 to 21 volunteers who donated 926 hours, providing full-time coverage at the HRC reception desk and working on important projects for the archeology, archives, library, and museum programs. The Volunteer Professional Program was instituted to bring current and retired professionals to the HRC to complete project work for these programs.

Volunteer Jay Antle worked more than 200 hours inventorying the archives' 1988 fire records. Volunteers also assisted the library staff by identifying which microfiche corresponds to which scrapbook in the library holdings. Long-time volunteer Robert Flather inventoried and identified photographs in a set of 40 albums created by park personnel between the 1920s and 1960s; he also assisted the park archeologist and archivist with research projects.

### **Projects of Note**

The archives has approximately 175 16mm films that document various aspects of park history, including Civilian Conservation Corps (CCC) activities, wildlife management, and tourism. Volunteers viewed some 100 titles of 16mm motion picture film, noting information that assisted temporary film cataloger Tara Cross in August. She created a catalog record for 68 of the films, which will now be accessible to all researchers, and compiled a prioritized list for future digitization projects.

The archivist updated information on the park's archives website and revised 10 online finding aids to provide a more systematic and standardized description of the park's holdings.

The most frequently sought information in the archives and library is about former Yellowstone employees. As envisioned by the archivist and librarians, Roger Whiteside of Computer Support Services developed an Access database that incorporates the payroll records of former employees, personnel rosters, staff listings, and organizational charts. Volunteers have so far entered 4,000 records, including the names of former Park Service and concessioner employees and where they worked in the park, which are proving to be a useful tool for genealogical researchers.

Shaffner's Bindery in Missoula, Montana, bound 218 theses and dissertations as well as 48 journals for the library and created 130 custom archival clamshell boxes to house rare books.

### **Outreach and Assistance to Other Divisions and Parks**

Almost 3,000 people used the HRC during 2006 for public and special tours, meetings in the conference rooms, appointments with collections personnel, and library patronage. In 2006 public tours of the facility were offered for the first time—61 tours for 595 people from June 14 to September 5. These tours were well received and helped to raise public awareness of the HRC and its mission.

Archives, library, and museum staff assisted the Division of Planning, Compliance and Landscape Architecture with the Lake Charrette project by aiding MSU architecture graduate students in conducting research and photographing plans and drawings. Archives staff also assisted the Division of Interpretation's Branch of Planning and Media by providing historic film footage for use in online video content.

In an effort to reach more volunteers and NPS and Yellowstone Association employees in the park's interior, the librarians created a bookmobile system that enables users to obtain library cards, delivers and picks up library books, and provides direct access to a lending library without having to come to the HRC. The librarians made nine trips into the park, with extended stops at the Old Faithful and Lake areas, and served more than 50 employees.

Museum staff continued to assist the Division of Interpretation with exhibit planning for the Old Faithful Visitor Education Center, and the Divisions of Business Management and Maintenance in planning for the Gardiner Transportation Complex. Staff also worked closely with the park ethnographer on the repatriation of several sets of human remains and associated funerary objects to the Eastern Shoshone and Shoshone-Bannock tribes.

Nine works of art from the park's collection were returned after being on loan to the "Drawn to Yellowstone: Artists in America's First National Park" exhibit, which opened at the Autry National Center in Los Angeles, California, in 2004 and traveled to the Buffalo Bill Historical Center in Cody, Wyoming, the Northwest Museum of Arts and Crafts in Spokane, Washington, and ended at the Museum of the Rockies in Bozeman, Montana, in August 2006. Moran watercolors, chromolithographs, and other Moran and William Henry Jackson items were also loaned for the "Thomas Moran: Painting the Parks" exhibit on display at the National Museum of Wildlife Art in Jackson, Wyoming, from May through October 2006 and a simultaneous exhibit at the Art Association in Jackson.

### **Noteworthy Accessions**

A Collections Advisory Committee was formed in 2006 to monitor possible acquisitions with the goal of ensuring that, given the rising cost of curation and preservation, only items that fit the park's Scope of Collections Statement (SOCS) and are in at least fair or good condition are accepted into the collections. The committee consists of the curator, the acting registrar, the archivist, a librarian, and the historian, as well as subject matter experts who may be called upon depending on the item under consideration. Items not accepted for the collections may, with the donor's approval, be offered to another museum such as the Yellowstone Gateway Museum (Livingston, MT), the Yellowstone Historic Center (West Yellowstone, MT), or Buffalo Bill Historical Center (Cody, WY). In the future, the committee will also consider possible deaccession of items currently in the collections that do not fit the SOCS or are in such a poor condition as to be of no use to researchers or exhibits. For both acquisitions and deaccessions, the committee makes recommenda-

tions to the park superintendent, who is responsible for the final decision.

**Museum.** The museum staff complied with a servicewide "Corrective Action Plan for Museum Collections" during 2006 which stipulated that parks must process all existing backlog accessions. Staff successfully completed this by adding 134 accessions to the collections and culling numerous "potential" accessions from the backlog. Noteworthy accessions included the donation by the National Park Foundation of a bronze bust of Harry Yount, considered Yellowstone's first park ranger, that was sculpted by Susan Vertel in 1995 and is currently exhibited at the Museum of the National Park Ranger; 28 lantern slides made by Adolph Murie for his report "Ecology of the Coyote in the Yellowstone" (1940); 23 more wolf skulls from the Wolf Project Office; rare travertine-coated specimens and sand sculptures; and numerous images of the park, including family photographs and a CCC photograph album. With museum staff contributing greatly to the cataloging numbers requested by the Intermountain Region to compete for much-needed servicewide cataloging funds in 2007, the Intermountain Region completed more cataloging than any other region.

**Archives.** The archives accessioned 45 linear feet of permanent federal records into the NARA affiliated archives, including records from the park's central files, as well as records from various park offices (superintendent, public affairs, research permits, and bear management). Non-federal records accessioned into the park archives included a collection of historical research materials compiled by long-time seasonal employee Robert Flather on snowshoe and patrol cabins, the Soda Butte area, roads, and bridges.

**Library.** The library accessioned 547 items, including microfilmed historical newspapers such as the *Livingston Herald* (1891–1898), the *Wonderland* (1902–1905) of Gardiner, and the *Gardiner Gateway Gazette* (1940–1941).

## Ethnography Program

The goals of the Ethnography Program are to develop the programs, guidelines, and information needed to help management identify and protect culturally significant resources of peoples traditionally associated with the park, and to support relationships between the park and the peoples whose customary ways of life may be affected by park activities.

### Intergovernmental Meeting

Twenty representatives from the tribes associated with Yellowstone National Park and Grand Teton National Park attended an intertribal and intergovernmental information exchange held in Grand Teton National Park on May 31. The 11 tribes represented were: the Confederated Salish and Kootenai, Confederated Tribes of the Colville Indian Reservation, Crow, Eastern Shoshone, Assiniboine and Sioux, Nez Perce, Northern Arapaho, Northern Cheyenne, Oglala Sioux, Rosebud Sioux, and Shoshone-Bannock. Yellowstone National Park was represented by Deputy Superintendent Frank Walker, Grand Teton National Park by Deputy Superintendent Jim Bellamy, and the National Elk Refuge by Refuge Manager Barry Reiswig. Other participants included park staff from Colter Bay museum collections, planning and compliance, wildlife, and cultural resources in both parks.

Discussion at the meeting focused on bison management in Yellowstone, Grand Teton, and the National Elk Refuge, but also touched on tribal-Park Service resource management partnerships and compliance efforts.

### Ethnographic Research and Management

*Scholars' Meeting.* With funding awarded to the Yellowstone Park Foundation by the National Endowment for the Humanities, ethnography staff were able to invite historians, anthropologists, and representatives from the Nez Perce, the Joseph Band of the Confederated Tribes of the Colville Indian Reservation, and the Confederated Tribes of the Umatilla Indian Reservation to a two-day meeting at Yellowstone in April. The meeting provided a rare opportunity for scholars from different disciplines and experiences to converge at Yellowstone and provide information that will be used in a variety of

ways to interpret the 1877 Nez Perce war as it relates to events that occurred in the park. Participants visited some of the key sites in the park and provided information regarding particular events that helped tie the Yellowstone segment of the Nez Perce National Historic Trail (NPNHT) to broader contexts and historical perspectives. Scholars engaged in extensive and lively discussions about the meaning and significance of the 1877 war, including pre-war Nez Perce use of lands that are now part of the park, why the Nez Perce came to Yellowstone as they fled east, and the legacy of post-war pain and suffering, often referred to as "historical trauma." The discussions provided park managers with ideas on how to most effectively convey that information to the public. The proceedings of the meeting will be used on Yellowstone's official website, for developing outdoor exhibits, and a brochure. Information generated from the meeting will also be used in interpretive services created by the NPNHT staff.

*Inventory of NPNHT Sites in Yellowstone.* With funding from the Yellowstone Park Foundation, archeology and ethnography staff of Yellowstone National Park examined five locations in the park where the Nez Perce are thought to have encountered tourists or to have camped in the summer of 1877. Archeologists and other representatives from the Nez Perce Tribe, the Chief Joseph Band of the Confederated Tribes of the Colville Indian Reservation, and the Confederated Tribes of the Umatilla Indian Reservation participated in the inventory. Nez Perce tribal elders also visited the park to provide information about the artifacts that were found and the encampment sites that were inventoried. The documentation of artifacts found along the NPNHT in Yellowstone will help park managers protect these sites and improve interpretation of the trail for park visitors. This was a pilot project whose results will inform the larger inventory scheduled to begin in 2008 that will cover the entire trail segment in Yellowstone.

*Nez Perce Commemoration.* Members of the Nez Perce Tribe visited Yellowstone National Park for three summer events that commemorated the 1877 war and the Nez Perce passage through Yellowstone National Park. Ethnography staff, as well as staff from park law enforcement and the Division of Interpretation, facilitated these traditional and educational events.

On the morning of August 26, several dozen Nez Perce tribal members, together with park staff and passing tourists gathered at the confluence of the Firehole River and the Nez Perce Creek, where the Nez Perce forded the river in 1877. The ceremony was meant to honor veterans of all wars and to create understanding and build friendships between the Nez Perce and other peoples. Horace Axtell, leader of the Nez Perce traditional Seven Drum Religion, and Wilfred Scott, a Nez Perce elder, conducted the traditional pipe ceremony. The ceremony included singing, drumming, and speeches in English and Nez Perce about the war, memories, and forgiveness. In his last official act as deputy superintendent, Frank Walker joined other park staff and tourists in smoking traditional pipes with the Nez Perce.



Frank Walker, Horace Axtell (spiritual leader of the Seven Drum Religion), and Wilfred Scott (former Nez Perce councilman) conduct 3<sup>rd</sup> annual Nez Perce pipe ceremony honoring ancestors who participated in the 1877 war.

On September 2, members of the Appaloosa Horse Club shared the history and culture of the Nez Perce with an audience of more than 100 at the Canyon amphitheater. Commencing with a parade of 12 horses and riders in full regalia, the evening continued with an hour-long presentation by club members. Descendants of 1877 war leaders and warriors shared their ancestors' stories of the war and what those stories meant for them today, bringing Nez Perce history alive with horses, traditional dress, and maps.

On the following day, 10 Nez Perce tribal members were joined by ethnography and law enforcement staff for an 18-mile trail ride on horseback along the Pelican Valley segment of the NPNHT.

Aaron Penny was excited to be "tracing the route on our horses and going into the backcountry, to see what our ancestors saw." This was the third time the Nez Perce Appaloosa Horse Club has ridden through the park in memory of the 1877 war.



Nez Perce tribal members in Pelican Valley on their annual trail ride of the Nez Perce National Historic Trail.

**Human Remains Re-interred.** The Native American Graves Protection and Repatriation Act requires a federal agency in possession of American Indian human remains to try to determine their cultural affiliation or relationship with a contemporary tribe. Yellowstone had three sets of human remains that were disinterred from the Fishing Bridge area during construction projects in the 1940s and 1950s. The preponderance of evidence obtained using the techniques of archeology, physical anthropology, historical documentation, and consultation with tribes indicates that they are the remains of Late Prehistoric ancestors of the Eastern Shoshone and the Shoshone-Bannock tribes. The tribes requested that the remains be re-interred near where they were exhumed. In October, ethnography and law enforcement staff facilitated the tribes' re-interment of their ancestors' remains. The tribes were grateful for the assistance from and the respect shown by the National Park Service.

**Wickiup Documentation.** Cultural anthropologist David White was contracted to prepare a report on the historical and ethnographic literature pertaining to the tribal use of wickiups (conical timber

structures) in what is now Bridger-Teton National Forest, Shoshone National Forest, Grand Teton National Park, and Yellowstone National Park. The completed report will be made available to the public in 2007 as the next phase of the study begins. Federal agencies will consult with tribes to learn who might be associated with the structures, their uses, and their cultural significance. To facilitate that consultation between the federal government and the tribes, ethnography staff worked with staff from the two national parks and the two national forests to video-document known and potential wickiups in these federal land jurisdictions.

**The Bannock Trail.** The Shoshone-Bannock Tribes are seeking national historic trail status for a route across the park that became known as the Bannock Trail. To respond to requests for information about the trail, archival research and limited fieldwork continued. Historical information from early park maps, traveler's journals, and park naturalists' logs were culled from the Yellowstone Research Library and archives. Ethnography staff completed limited fieldwork in an attempt to find evidence of any segments of the trail. However, recent research (see Archeology section) has identified the widespread presence of old wagon and freight roads, many in the general area where the Bannock Trail was believed to be, making identification of aboriginal presence difficult. The results of both historical and field research have been compiled into a report that is being circulated internally for review before being made available to the public. The Shoshone-Bannock tribes are planning a trip to the park in 2007 to visit segments of the trail and relay oral histories about it.



*NPS interns Hannah Larkin and Mollie Chapman measure the width of the possible vestige of a historic trail in the Tower area.*

## Historic Road Rehabilitation

Yellowstone National Park's historic roads are a nationally significant example of early public road construction. Cultural staff make every effort to ensure that rehabilitation of these roads retains their integrity of materials, workmanship, feeling, and association through the use of natural materials and a continuing design philosophy, including preservation of historic curves and blending with the natural landscape.

### National Award for the Dunraven Segment of the Grand Loop Road

The first phase of the reconstruction of the Canyon Junction to Tower Junction segment of the Grand Loop Road was chosen as the winner of the prestigious "Excellence in Highway Design" for 2006 by the Federal Highway Administration. The Western Federal Lands Highway Division took the top prize in the Highway Improvements on Publicly Owned Lands category. The runner-up in this category was the recently completed final segment of the Natchez Trace Parkway, a 444-mile parkway that has taken 67 years to complete, making Yellowstone's road program appear to be moving along at a rapid clip.

### Reconstruction Progress on East Entrance Road

Work progressed smoothly on the reconstruction of the Sylvan Pass to East Entrance Station segment. The historic cut stone masonry guard walls were reconstructed, new stone masonry retaining walls finished, and numerous rockery retaining walls installed to decrease road construction impact on the cut slopes and rock faces of the Langford Formation. Masonry work was completed on the improved parking areas and the newly constructed Corkscrew Bridge Parking Area is near completion, with minor alterations planned for 2007 to improve the views of this unique historic structure. The simulated stone retaining wall on the cut side of the road along this section was completed and blends well with the terrain. Work on the two-mile segment of road approaching the East Entrance Station began in 2006 and progressed well. The road construction is expected to be completed by the end of the 2007 season.

### Slough Creek Wagon Road Documentation

The Slough Creek Wagon Road is the only non-motorized, horse drawn wagon road still in operation in YNP today. The road, which originates as a spur off the Northeast Entrance Road, passes through the northern portion of the park and provides access to the Silvertip Guest Ranch and the Gallatin National Forest north of the park boundary. A Gallatin National Forest project to remove a small portion of the road from the flood plains and water-inundated banks of Slough Creek provided the opportunity for U.S. Forest Service archeologists and park staff to work together during the summer of 2006 to document the road and the constructed features associated with it. Field documentation has been completed and Montana and Wyoming cultural site forms for the Slough Creek Wagon Road will be finalized in 2007 and submitted for review by the Montana and Wyoming Historic Preservation Offices to comment on National Register eligibility. Documentation included recording of a previously unidentified precontact archeological site bisected by the wagon road in the Montana portion of the park. The tools and large quantity of chert flakes indicate the site represents a campsite where lithic reduction activities were taking place. The Montana State Historic Preservation Office concurred with YNP's determination that this site is eligible for listing on the National Register of Historic Places.

### National Register Nomination for the Beartooth Highway

Previously YNP entered into a Memorandum of Agreement with the Wyoming State Historic Preservation Office, the Shoshone National Forest, and the Federal Highway Administration to nominate the Beartooth Highway to the National Register of Historic Places as a mitigation of the adverse effects of the reconstruction of this historic and scenic roadway. In 2006, cultural resource staff reviewed the nomination papers, drafted by Historic Research Associates, Inc., and found them to be well researched and well written. YNP will, on behalf of the Beartooth Highway's owners and managers, initiate the National Register review process.

### Assessments for Roads and Road Features

To comply with a new List of Classified Structures (LCS) requirement, a great amount of effort was



*Wagon and mules on Slough Creek Wagon Road.*

expended during 2006 to take digital photographs of and assess the condition of previously documented road features. Many of Yellowstone's historic roads were entered into the LCS system but do not have current condition assessments. Over half of the field assessments for the road structures were completed in 2006 including condition assessments for 11 bridges, 3 entrance roads and their associated features, and 3 segments of the Grand Loop Road and associated features.

### Historic Preservation Compliance for the North Rim Drive/Inspiration Point Roads

Throughout 2006, park staff spent much time working with Federal Highway Administration staff to refine the plans and designs for the repair of the roadway and various historic features of the North Rim Drive/Inspiration Point road as well as the Artist Point parking and viewing areas. The designs are complicated by thermally altered soils throughout the Grand Canyon of the Yellowstone roadways and viewing areas and the intensive visitor use and confined spaces located within this constructed landscape. In August 2006 the Wyoming Historic Preservation Officer and the Advisory Council on Historic Preservation concluded their final consultation on the effect of the repair and repaving of the North Rim Drive/Inspiration Point Road, concurring that no historic properties will be adversely affected. Road and parking area design sheets were provided to both agencies along with a summary statement describing the planned rehabilitation of the roads and the historic properties found within

the area of potential effect. Rehabilitation of the canyon rim roads is expected to begin early in the 2007 construction season.

## Historic Structures

In the past four years, more than 5,000 participants in the Tauck Guest Volunteer Program (sponsored by Tauck World Discovery) have donated almost 15,000 hours of labor to help maintain the appearance of the park's public areas and preserve historic structures in the West Thumb, Grant Village, and Old Faithful areas. The total value of this work and a donation of approximately \$100,000 from Tauck World Discovery and the Tauck Foundation, amounts to almost \$400,000. It was one of four volunteer programs to receive the "Preserve America" Presidential Award from President George W. Bush and First Lady Laura Bush in a ceremony at the White House in May of 2006.

In addition to the cleaning of amphitheaters, picnic and campground areas, guardrails, parking lots, and winter debris that frees up trained NPS staff for more technical maintenance work, this year the program participated in several large projects, including staining of the quarter-mile long Fishing Bridge, stabilization of employee cabins at Old Faithful, and prepping and staining or painting seven additional structures, bringing the total number of buildings brought up to good condition from fair to poor condition to 27.

Other historic structures projects that were underway during 2006:

- Second-phase stabilization of Fort Yellowstone NHL District's 1891 Cavalry Stable
- Structural stabilization of the 1895 Mail Carrier's Cabin in Mammoth Hot Springs
- Exterior stabilization of two of four Soap Suds Row NCO Quarters
- Stabilization work on the Lake Fish Hatchery buildings done with Cultural Cyclic Maintenance funding
- Development of a historic structures formal condition assessment form
- Completion of a historic structures report on the ca. 1927 Old Haynes Photo Shop at Old Faithful
- Completion of Historic American Building Survey photographs of Mission 66 structures including the Old Faithful Visitor Center and Theaters, the Tower Falls Store, and the Tower Junction Gas Station
- List of Classified Structures (LCS) survey work, including completion of most of the front country structures and trips into the backcountry to evaluate and record cabins and barns

The historic architect continued to collaborate with the Virginia City, Montana, historic preservation team as on-site grant coordinator and technical representative for the National Park Service, and assisted staff from the park's Divisions of Interpretation, Maintenance, Business Management, and Planning, Compliance, and Landscape Architecture on various projects. The Historic Structures Program was successful in competing for both Cultural Cyclic Maintenance projects and Historic Structures Stabilization projects, scoring well enough in the latter to obtain funding for two of four projects awarded funds for 2007.



*New Lake fish hatchery, 1928.*

## Yellowstone History

The park historian completed the research and writing of these projects during 2006:

- a long study for park planning efforts, “A History of the Old Faithful Area, with Chronology, Maps, and Executive Summary”;
- a book manuscript, “Storytelling in Yellowstone: Horse and Buggy Tour Guides,” to be published by the University of New Mexico Press in February 2007;
- “A History of Parcels ‘L’ and ‘M’ in the Northern Addition to Yellowstone National Park, Formerly Known as the Stermitz Ranch,” for the park’s Gardiner Basin Restoration project; and
- “A Brief Look at Moran Point and Artist Point and Their Association with Thomas Moran and William Henry Jackson,” which pertains to the park’s ongoing planning for the Artist Point area and was published in *Yellowstone Science* 14:4 (Fall, 2006).

He hosted and oversaw the work of three interns from Montana State University: Rachelle Schrader (undergraduate) and Michael Fox (graduate student) in the spring and Bradley Snow (graduate student) in summer. The interns, along with longtime VIP Mary Anne Bellingham, provided the valuable service of reading and summarizing dozens of newspaper and other published historical accounts of trips to Yellowstone that are part of a growing database used constantly in the history program. The historian worked with Computer Support Services to arrange access to “Newspaper Archive Dot Com,” an internet website that enables park staff to search hundreds of newspapers nationwide for historical accounts describing trips to Yellowstone.

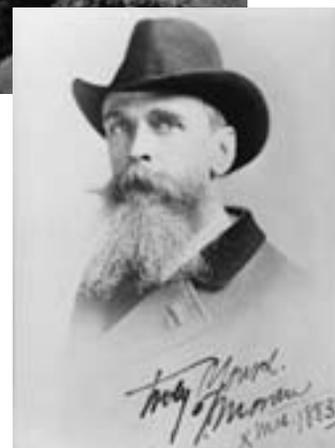
Also during 2006, the park historian:

- wrote the foreword to the new edition of *The Geysers of Yellowstone* (2007) by T. Scott Bryan;
- advised the Division of Interpretation on exhibits to be placed in the new Old Faithful Visitor Center;
- taught an undergraduate class at MSU on the “History of Yellowstone and the Northern Rockies” and classes for the Yellowstone Institute on “Southern Roadside History of Yellowstone” and “Military History of Yellowstone;”

- supervised the work of VIP Tom Carter, who is preparing an article for *Yellowstone Science* about the history of the park’s backcountry trails;
- spoke with the editor of the *Yellowstone Journal* to provide information for an article about Yellowstone’s top 10 historic events that was published in the Fall 2006 issue;
- provided advice on place names for the ongoing project to catalog the park’s thermal features; and
- accompanied the Brigham Young University Special Collections Librarian to Bozeman, Montana, to catalog rare Yellowstone items in the private collection of Ron Lerner for an upcoming co-authored bibliography of 13,000 Yellowstone items.



Lower Falls of the Yellowstone, William H. Jackson, 1871. NPS photo.



Thomas Moran in 1883.