

YELLOWSTONE SCIENCE

volume 12 • number 4 • fall 2004



Heritage and Research Center

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Myth and History in the Creation of Yellowstone National Park

Yellowstone's Botanist and Herbarium

Musings from the Berry Patch

The Bridge Bay Spires



This 1902 first edition of John Muir's *Our National Parks* includes an essay on his 1885 visit to Yellowstone. The book is inscribed to Hiram Chittenden, who donated it to the park. It now resides in the research library in the Yellowstone Heritage and Research Center.

Sharing Our Heritage

THE DUST HAS SETTLED. Those of you who live in or pass through Gardiner may have noticed the Yellowstone Heritage and Research Center (HRC) rising up and taking form this past year. Finally, Yellowstone will have a state-of-the-art facility, commensurate with the quality of the collections it houses. Prior to this, the park's historians, archivists, librarians, and curators struggled heroically to preserve our invaluable items in the cramped quarters of the basement of the Albright Visitor Center. Interpreters working upstairs tell stories about these faithful stewards of our history quickly mobilizing to carry out our most treasured and sensitive objects in cardboard boxes whenever there was a plumbing accident in the restrooms above.

The title of the recent management consultant book, *Who Moved My Cheese?*, echoes in my mind the question, "Who moved our heritage?" The answer: teams of curators from all over the National Park System, who flew in to assist with this Herculean task that required such precision and care, all under the direction of park curator Colleen Curry, who not only masterminded this monumental effort, but planned a wedding (her own) at the same time.

When the HRC opens, we will be able to offer much easier access to our library, archives, and museum collections. We will finally be able to more readily share our heritage with park employees, visiting researchers, and interested members of the public; the HRC has a large reading room and a public research room for this purpose. The accomplished interpreter, Freeman Tilden, wrote about the power of "the thing itself." Yellowstone's collection has 5.3 million such things. Together, they tell the origin stories of Yellowstone, the National Park Service, and the world-wide conservation movement. I get inspired each time I see things like a first edition of John Muir's *Our National Parks*, signed by the author, or Native American

artifacts, or an original Moran painting, or some of the first ranger uniforms, or the Shaw and Powell stagecoach, and on and on. For more information on the history of the collections and the HRC, read Tami Blackford's article in this issue.

The HRC also preserves many natural history items. In this building, you'll find geology, paleontology, and archeology labs. A *Yellowstone Science* interview with park botanist Jennifer Whipple goes into detail about the park's herbarium, now in the HRC. Dr. Russell Cuhel's article about the spire removed from the bottom of Yellowstone Lake, which now resides in the park's museum collection, highlights a research effort that was inspiring both scientifically and aesthetically.

This fall, after cleaning up my family's home in Florida after a barrage of hurricanes, I took a well-needed vacation to Europe for several weeks. I saw the remarkable natural and cultural history collections in Vienna, Austria, preserved by the foresight and largesse of Empress Maria Theresa. I marveled at the awesome beauty of the Swiss Alps. In Florence, I viewed Michelangelo's masterpiece sculpture of David. I hiked the trails of Italy's Cinqueterre National Park. I stayed in a restored farmhouse villa dating back to the year 998. I was immersed not only in the Tuscan sun, but in its history, vineyards, food, wine, and the good will of its people who were proud to share their culture. Walking through the narrow stone streets of the medieval hill town of Assisi to the Basilica of St. Francis, I came upon a strangely familiar sight—the same plaque denoting a World Heritage Site as we have here in Yellowstone. I was reminded of the international significance of Yellowstone's resources, and was happier still that we will soon be better able to share our heritage with people from all parts of the world.

Roger Anderson

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on the cover:

The Yellowstone Heritage and
Research Center, 2004.

NPS photo by Virginia Warner.

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A snowplane cockpit and a circa 1915 plate from the Canyon Hotel. Both items are part of the museum collection, which now resides in the Heritage and Research Center.

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NEWS & NOTES

NPS/TAMI BLACKFORD

Translocated Canada Lynx Travels Through YNP

This past summer, a biologist with the Colorado Division of Wildlife notified Yellowstone staff that a male lynx they had translocated from British Columbia to Colorado was passing through the Greater Yellowstone Area. The lynx was released in March 2003 and equipped with a Dopplar collar tracked by satellite. In early June, he left his established home range in the Snowy Mountains of Wyoming. At the end of July, he was west of Jackson, Wyoming. In early August, he was located near the Grassy Lake Reservoir between Yellowstone and Grand Teton National Parks, and then near Mammoth Hot Springs in Yellowstone. By late August he was north of Livingston, Montana, near the Crazy Mountains. In October, the lynx turned west and was located north of Missoula, Montana.

This is considered an unusual move for a lynx translocated to Colorado, but long distance moves by lynx in general are not uncommon. Biologists suspect the cat may return to his home range, or even to Colorado. There wasn't enough data to know if the lynx interacted with any individuals resident to the Yellowstone ecosystem, but it does not appear that he traveled around the east side of Yellowstone Lake, where there are resident lynx in the park.

Nez Perce Memorial Ceremony

On August 21, 2004, for the first time in Yellowstone National Park's history, members of the Nez Perce (or Nimípuu, meaning "we the people" or the "real people") gathered in the park along Fountain Flat Drive near Nez

Perce Creek for a memorial and pipe ceremony to commemorate their ancestors who endured hardship and died in the park during the 1877 Nez Perce War. The memorial was also open to and attended by park visitors and staff, including Superintendent Suzanne Lewis and Deputy Superintendent Frank Walker, who for almost eight years was superintendent of Nez Perce National Historical Park in Spalding, Idaho.

Nez Perce Elder Horace Axtell and Tribal Council Member Wilfred Scott led the ceremony. It began with a brief introduction, which was followed by drumming, singing, and a flute song played by Levi Holt. All the men present at the ceremony were invited to join the pipe circle, and then all women veterans and law enforcement officials as well.

Eight Nez Perce Appaloosa Horse Club members in full regalia rode down the hill and around the pipe circle three times counter-clockwise. Kay Kidder, president of the Nez Perce Appaloosa Horse Club, Director of Adult Education for the Nez Perce Tribe, and daughter of Horace Axtell, introduced the riders, then talked about her relatives who were in the war and came through Yellowstone, and how that history has affected her life. The Nez Perce rode down along the Firehole River in single file and back up the hill.

When the pipe ceremony began, everyone was asked to put recording devices away. Two pipes were passed around the circle, again counter-clockwise, three times. Introductions were made around the circle, and some people told a short story about themselves, how they were related to the Nez Perce who came through the park, and the wars they have fought in. Many

gifts were presented by the Nez Perce. Everyone participated in the conclusion of the gathering, the retiring of the eagle-feather staffs, which, to the Nez Perce, is like the lowering of the American flag.

Bird Deaths at Heart Lake

During the last week of August, park ornithologist Terry McEneaney was notified of several songbird deaths reported by visitors at Heart Lake. Richard Jones, backcountry ranger at Heart Lake, collected several songbirds and relayed information concerning the findings to McEneaney. On September 1, McEneaney traveled to Heart Lake to identify the species and examine the scene where the deaths occurred. Although West Nile Virus has not reached YNP yet, it could occur at any time, and this incident was investigated thoroughly, to either rule it out or properly document it. With help from two wildlife pathologists, necropsies were performed on several of the specimens. All concluded that because the birds were insectivores, they most likely died from starvation as a result of a storm in the Heart Lake area on August 25–26. The birds' intestines were empty of food, which is a classic symptom of starvation. The nine birds collected were as follows: one yellow-rumped warbler, one olive-sided flycatcher, two tree swallows, and five Western wood-pewees.

Congratulations to NPS Archeologist Jacquelin St. Clair

Jacquelin St. Clair, NPS archeologist at Grand Teton National Park, has been elected by the general membership to the Board of Directors, Members at

Large, of the Plains Anthropological Society. Congratulations to Jackie, for the peer recognition of your professional abilities, ethics, and dedication.

The Plains Anthropological Society's membership includes individuals from all branches of anthropology and related disciplines. The two primary functions of the society are to hold an annual conference, the Plains Conference, and publish a peer-reviewed quarterly journal, the *Plains Anthropologist*. Both activities are dedicated to communicating and disseminating information about past and present human cultures on the North American Great Plains.

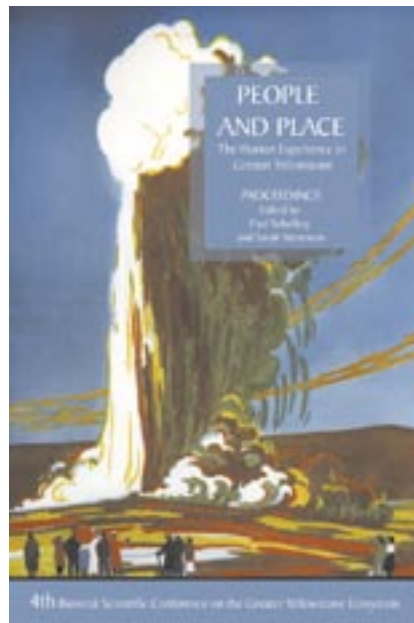
Archeology has been the focus of many of the society's activities and publications, but major contributions are also made by ethnohistorians, ethnologists, linguists, physical anthropologists, and geoscientists. Students and private citizens as well as professionals enjoy membership in the Plains Anthropological Society.

Jacquelin St. Clair received a BS and MA in Anthropology from the University of Wyoming, with emphasis in High Plains archeology and bioarcheology. She has conducted fieldwork in the Rocky Mountains, Plains, and Great Basin. Her goals for Grand Teton National Park are to continue archeological research of the High Plains and Late Paleoindian Foothill/Mountain sites, seeking a better understanding of how sites within this area of northwestern Wyoming should be understood within the broad picture of human adaptation in the region. Additional duties at Grand Teton National Park include overseeing site recordation and protection, educational and ethnographic projects, and working as liaison for tribal issues.

An enrolled member of the Seminole Nation, Jackie was a 1999 recipient of the Plains Anthropological Society's Native American Student Award. Her stated goals for her term on the Board of Directors of the Plains Anthropological Society are the development of special programs and sessions pertaining to the cultivation of positive relationships between native peoples and anthropologists.

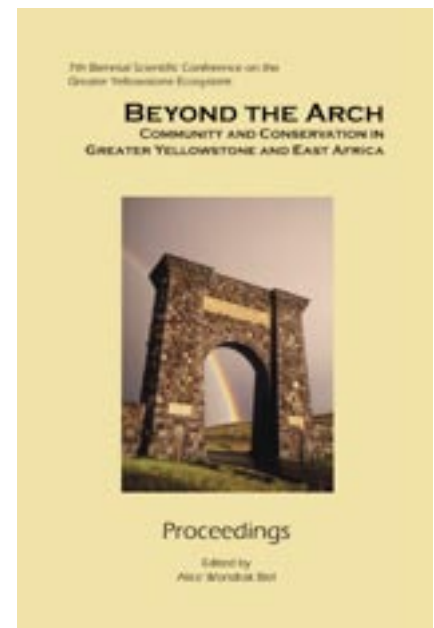
Fourth and Seventh Conference Proceedings Almost Available

In 1997, the Fourth Biennial Scientific Conference on the Greater Yellowstone Ecosystem, *People and Place: The Human Experience in Greater Yellowstone*, focused on the past, present, and future of the area's cultural resources.



Anyone who presented at or attended the conference is on the list to receive a copy of the proceedings, but we need your help. We assume that our mailing list is out of date. If you attended the

conference and would like us to send you a copy of the proceedings, please call or email Virginia Warner at (307) 344-2230, or virginia_warner@nps.gov with your current address. If you were not an attendee but would like to receive a copy, you may also contact Virginia, as there will be extra copies available. They will be printed after the first of the year.



The proceedings from the Seventh Biennial Conference on the Greater Yellowstone Ecosystem, *Beyond the Arch: Community and Conservation in Greater Yellowstone and East Africa*, will also be available after the first of the year. This conference took place in October 2003, and hosted a world-class slate of keynote speakers, including Dr. Richard Leakey. The primary theme that emerged from the conference was the question of whether conservation efforts are most effectively directed from the national or local scale. If you would like to receive a copy, please call or email Virginia Warner as above.

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PASSAGES — GLEN F. COLE

by Mary Meagher

GLEN F. COLE was born in 1926 and died in August 2004. He was supervisory research biologist in Yellowstone National Park from 1967 to 1976. He was a scientist, a dedicated field biologist, and a fine fly fisherman.

Yellowstone was fortunate to have Glen Cole. He came to Yellowstone from Grand Teton in the latter part of the furor generated by the elk reductions of the 1960s in Yellowstone National Park. He commented once that he thought the park had been on the verge of Congressionally-authorized elk hunting (the only way hunting could happen in Yellowstone), and his assignment was as a scientist, to assess the data on which the reductions had been based, foster the acquisition of new data, and to advise management accordingly.

Because of the reduction turmoil, and because of two independent assessments of the state of science in the national parks (the Robbins Report made by the National Academy of Sciences, and the Leopold Report, both in 1963), the Park Service again became serious about science, particularly to address problems of national parks as natural areas. Glen became the supervisor of the research staff assigned to four national parks that had contentious large mammal issues: Glacier, Yellowstone, Grand Teton, and Rocky Mountain. He and all the personnel he supervised were Washington Office employees who were field assigned, to distance the science efforts from direct supervision by park management.

Glen was unusual in his ability to embrace different agency objectives. His professional career had begun as a biologist for Montana Fish and Game (now Montana Fish, Wildlife and Parks). In working for that agency, he

was immersed in questions related to maximum sustainable harvests of game animals, and in related topics of range management—the primary objectives of all game and fish departments of the time. But Glen readily (and eagerly) shifted his thought processes to the radically different management objectives that pertain to natural area management. He began to question such dogma as how an animal (elk in this case) could evolve to destroy the food source essential to its own survival over time—the overgrazing issue that plagued the Yellowstone elk topic for decades. He asked how plant and animal systems functioned successfully for the millennia before biologists, hunters, range managers, and agency bureaucrats arrived on the scene. He looked at range management techniques he'd used in his former professional life and questioned their validity, commenting that only if a technique or measurement entailed population consequences for the species at question might insight be gained into the real plant–herbivore relationships. Underlying all of these was the question of what had or had not present-day people done to alter the system.

A favorite saying was “small but excellent” in referring to the half dozen research biologists he supervised and the product he expected from them. He was committed to data if at all possible, and rightly so, to support management actions, but he recognized that management cannot always wait for all the answers. Sometimes a carefully reasoned rationale might be necessary, drawing from the then-available ecological literature, and that a program might change with new data—now called that “in” term *adaptive management*. (The grizzly bear controversy that focussed on how and when to close

the park's open-pit garbage dumps is a classic example.) In many respects ecologically, Glen was ahead of his time. His legacy to Yellowstone focused on elk and the other large ungulates, grizzly and black bears, restoring a natural fire regime, fostering native fish over the introduced non-natives. But he laid much ground work for other issues such as the eventual return of the wolf.

The research office was an exciting place to be with the constant back and forth discussions that Glen generated so well. Indeed, he was at his best in that setting, or that of his Montana generation, one-on-one over a bourbon or other suitable libation. A gifted public speaker he was not, nor did the ego trappings of status and visibility hold much for him. His yardstick was whether or not a person could do the job they'd hired out to do, and whether or not, individually and collectively, his people could make the park a better place as a natural area.

Gladys Cole, his wife, was a crucial part of all this, as “sounding board,” social secretary, critic when useful, and otherwise the private supporter that did so much to foster what he accomplished. As Gladys noted in her communiqué to those of us who knew Glen well “We often called him the ‘Kabetogama Curmudgeon’ but we fondly remember him as a loving husband and father, first class fly fisherman, and a dedicated biologist.”

For more information, see Glen Cole's interview in *Yellowstone Science* 8(2):13–18. For historical documentation of Glen Cole's time, see: Pritchard, James A. 1999. *Preserving Yellowstone's Natural Conditions: Science and the Perception of Nature*. University of Nebraska Press. Lincoln, Nebraska. Sellars, Richard W. 1997. *Preserving Nature in the National Parks: A History*. Yale University Press. New Haven, Connecticut.

YS



NPS/VIRGINIA WANNER

The Yellowstone Heritage and Research Center

A Worthy Home for Wonderland's Collections



Tami Blackford



NPS/VIRGINIA WANNER



In 1928, the display of an old stagecoach in front of the Mammoth museum prompted a Congressional inquiry into the park's preservation of it. The Congressman was told that the stagecoach was only outside during the summer season and that if a large museum should be built at Mammoth, the stagecoach would be exhibited indoors and given preservation treatment. He was also told that the park did, indeed, understand the value of the stagecoach.

ALTHOUGH NOT YET GUARANTEED A PERMANENT HOME, a stagecoach will soon be on public exhibit, indoors, in a large museum storage facility on Yellowstone National Park land in Gardiner, Montana: the Yellowstone Heritage and Research Center (HRC). After years of planning, financial struggles, and a summer of backbreaking labor, Yellowstone's museum, library, and archival collections have finally moved into their new home in the HRC. Making this historic move were items such as original Thomas Moran watercolor sketches, more than 500 images by noted Western photographer William Henry Jackson, artifacts from prehistoric sites such as Obsidian Cliff National Historic Landmark, weapons and uniforms from the U.S. Army and National Park Service, and Nathaniel P. Langford's



Thomas Moran's 1871 watercolor sketch of Firehole Springs.

original handwritten lecture presented in various places during the winter of 1870–71 to popularize the Yellowstone area. When Ferdinand V. Hayden heard this lecture in Washington, D.C., in January 1871, he was inspired to ask Congress for funds to support an exploratory expedition to the region, which became a reality that summer. The rest is history. The HRC now houses these items and millions more in a facility worthy of the national and international significance of Yellowstone's collections, their need for protection, and the public's desire for accessibility to them.

It seems fitting that this building was completed in 2004, while the National Park Service (NPS) celebrated its museum centennial. In 1904, Yosemite National Park established an arboretum that is arguably the first museum in a national park. Collectively, the NPS manages the world's largest museum system, with more than 350 parks preserving more than 105 million objects, specimens, documents, and images. What makes these collections extraordinary is that they are often preserved in the actual places where people and events have shaped history and the environment. It is NPS policy to collect, protect, preserve, provide access to, and use objects, specimens, and archival and manuscript collections to aid understanding and advance knowledge. Collections play important roles in resource management, research, and interpretive programs, and function as baseline databases for park natural and cultural resources.

Yellowstone has the second largest collection in the NPS, with more than 5.3 million items (the largest belongs to Edison National Historic Site, which contains more than 6 million items). For comparison to other large, primarily natural resource parks, the collections in Yosemite consist of more than

2.1 million items, in the Great Smoky Mountains there are more than 440,000, and in the Grand Canyon, more than 360,000. Yellowstone's collections document not only the cultural and natural history of the world's first national park and the condition of its resources, but also national parks and conservation movements throughout the world. The collections grow continuously with the addition of archival records, archeological and natural science objects, and important donations and purchases, such as the more than 20,000-item Susan and Jack Davis Collection (highlighted in *Yellowstone Science* 9:4). About 5,000 Davis Collection items are still in storage in Bozeman, Montana, awaiting the purchase, funded by the Yellowstone Park Foundation, of storage cabinets for the HRC.

The park's museum, library, and archives were previously located in 2,848 square feet of the basement of the Horace Albright Visitor Center at Mammoth Hot Springs. There, they were visited by more than 1,500 people annually, most of them researchers, including undergraduate and graduate students and historians. Other visitors are filmmakers, documentary producers, journalists, other media professionals, park staff, and the general public. The number of people wanting access to the collections is expected to increase dramatically when the HRC opens to the public in spring 2005.

For years, the collections were housed in various locations within and outside the park, where they were frequently threatened by flood, fire, environmental degradation, theft, and inattention. With the opening of the HRC, the collections of "Wonderland" are finally housed together (with the temporary exception of the historic vehicles, *see sidebar, "HRC Phases II and III, and the Historic Vehicle Collection"*), and their storage brought up to the standards demanded by

the NPS, the American Association of Museums, and the National Archives and Records Administration. This 32,000-square-foot, state-of-the-art facility is located on seven acres adjacent to the Gardiner School. It now houses almost 3,000 linear feet of historic records, 90,000 photographic prints and negatives, 20,000 books and manuscripts, and 300,000 natural science specimens and cultural objects. The HRC provides a 500% increase (from 1,642 to 8,017 square feet) in library and archives space including storage, processing areas, reading rooms, and offices, and a 700% increase (from 1,206 to 8,906 square feet) in museum spaces including storage, processing areas, and offices. It was not only designed to improve space for the collections, including room for 25 years of growth, but also to improve access and ease working conditions for employees, visitors, and researchers; increase security; better accommodate tours; and showcase rotating exhibits. How this facility came to be is a story in itself.

The Park and its Collections are Established

When Congress established Yellowstone National Park on March 1, 1872, no funds were appropriated for its management. For its first 14 years, civilian “volunteer” superintendents appointed by the Secretary of the Interior administered the park, but they kept very few records. The earliest original pieces in the archives, which are letters from Superintendent Philetus W. Norris, date to 1877. There are also photocopies and microfilm of letters (the earliest are from Superintendent Nathaniel P. Langford to the Secretary of the Interior) and records dating to 1872. The originals reside at the National Archives in Washington, D.C.

When the U.S. Army arrived in 1886 to administer the park, they instituted military record-keeping practices, documenting park activities, management decisions, and the philosophical development of the national park idea until their departure in 1918. With its creation in 1916, the National Park Service took over the park’s administration, inheriting the policies and philosophies established by the military. At that time, Horace Albright, who had been influential in establishing the NPS and was a future Yellowstone superintendent and NPS director, insisted that the army’s park administration records remain in Yellowstone. (Their military records are held at the National Archives in Washington, D.C.) The army’s records as well as the early NPS records therefore remained in the park, but were stored haphazardly in various closets and buildings. It wasn’t until 1935 that the National Archives Act



This Willys pumper truck (left) and tank truck (right) are part of the historic vehicle collection. See the park’s website at <http://www.nps.gov/yell/technical/museum/historicvehicles/index.htm> for more information on this fascinating part of the museum collection.

HRC Phases II and III, and the Historic Vehicle Collection

Two HRC wings are still in the plans, although no funding is currently available for either. An east wing (Phase II), for which funding proposals are out in the amount of \$3,852,800, would add a 14,000-square-foot, single-story building for the storage, preservation, and display of the museum’s historic vehicle collection, including room for 25 years of growth. Many of these vehicles were received from former park concessioners, but new vehicles are added to the collection as they become obsolete or surplus to needs. For example, this fall, a two-stroke snowmobile was added.

Yellowstone’s vehicle collection is the largest and most significant in the NPS. It contains 30 horse-drawn and motorized vehicles, ranging from stagecoaches to touring cars to a fire engine. The vehicles occupy 8,000 square feet in a historic 1925 warehouse assigned to a park concessioner on park land in Gardiner, Montana. The building also houses the park’s recycling center, and was not designed for

museum storage. Volunteers have cleaned the vehicles, and the Yellowstone Association and Yellowstone Park Foundation have provided funding for vehicle preservation and conservation. Federal funding has also recently allowed for extensive preventive conservation treatment by NPS staff. Despite improvements to the warehouse’s environment and efforts to reduce pest infestations, the building remains deficient according to NPS museum standards. It is also poorly located for security and safety concerns, and inaccessible to the public.

A science research wing to the west (Phase III), for which funding is not yet being sought, will house natural history research and laboratory facilities for staff and outside researchers. There are currently more than 200 research projects taking place in the park by scientists from all over the world. Research project subjects range from education and management to archeology to microbiology to bison, elk, and wolves. Findings from such research benefit park management.

provided a systematic and centralized process for the preservation of records documenting government administration. (See sidebar, “What’s Worth Saving?”.)

Lee Whittlesey’s upcoming book, *Storytelling in Yellowstone: Horse-and-Buggy Tour Guides in the Grand Old Park, 1872–1920*, reports on the early establishment of the library and museum collections in the park. Attempts to establish a park library took place as early as 1902, when Major Hiram Chittenden supervised the collection of park literature including books, magazine articles, and newspaper clippings. He also donated many of his personal books to the park. Captain George S. Anderson, acting superintendent from 1891–1897, amassed a large personal collection of park-related books and articles and donated it to the park as well. In 1908, Acting Superintendent General S.B.M. Young bought books to better educate and inform staff, and from these three sources, a research library was formed. In 1933, a group of private citizens founded the Yellowstone Library and Museum Association (now the Yellowstone Association, the park’s cooperating association), with the initial goal of establishing and developing a research library for Yellowstone National Park. To this day, the Yellowstone Association provides funding to the park for librarian positions and many other aspects of the museum and library programs.

Depending on your definition of a museum, one of the first efforts to establish a museum in Yellowstone took place in 1874, when Harry Horr, Jack Baronett, and Captain Frank Grounds made plans for a zoo to exhibit park animals, but it is unknown whether the idea became reality. In 1885, George L. Henderson set up his short-lived Cottage Hotel “museum,” which was also a gift shop or store, and contained coated specimens, stuffed animal heads, and mounted birds. Around 1910, Milton Skinner heard about a proposal to build a government museum at Mammoth and began to advocate it. In 1913, Acting Superintendent Colonel Lloyd M. Brett was the first government official to suggest that the new administration



Items such as this table and chair are collected because they represent early furniture used in the park’s hotels.

What’s Worth Saving?

Although the HRC was designed to accommodate 25 years of growth in the collections, the museum storage area (when the huge backlog of objects that need to be cataloged and housed is included) is practically filled to capacity—the result of just how difficult it was to project that need. During the planning for the HRC, it was considered that in the future, the park would install rail-mounted, high-density shelving as a means for accommodating collection growth. Therefore, the floors in the collection storage areas were designed for the heavier loads imposed by such storage systems. It takes a lot of room to properly store and preserve objects, and the collections will, inevitably, need more space. As with all museums that actively collect, someone has to decide what is worth saving.

To facilitate that process, the museum and the library both have a Scope of Collections statement that describes what the park should and needs to collect. Museum curator Colleen Curry plans to establish a collections acquisition committee to discuss each new item. Once an object is accepted into the collection, it becomes an expensive endeavor to preserve, protect, and interpret it for future generations, so a lot of thought needs to be given to each object. It is fortunate, because the park can’t accept everything, that several other museums in the area collect similar objects and themes.

Staff also plan to start a deaccessioning program, which is the formal way of removing objects from the collections. As with many museums, whenever someone offered an object in the park’s early days, it was usually accepted, regardless of whether it really belonged. Deaccessioning is an involved process that requires many people’s input to maintain a system of “checks and balances,” ensuring that important items are not removed just because a single individual does not like or does not understand an object. A deaccessioned item is first offered to another NPS or non-profit museum.

For archival materials, the Federal Records Act of 1950 sets the guidelines for managing all newly generated records. The General Services Administration puts out a handbook for all federal agencies that lists schedules for all documents, including the length of time they must be retained and how they must be disposed of. In Yellowstone, the archives tries to actively collect both scheduled and unscheduled, historically significant records that provide evidence of park policies, procedures, and functions as well as important information on people and events. Some examples include wildlife censuses, staff meeting minutes, road and building project reports, wildland fire reports, and correspondence between park staff and members of Congress.

building being constructed in Mammoth also incorporate a museum to house “all that is interesting in historical data and specimens of natural curiosities, etc.,” but for many years, the idea of a museum in Mammoth was put on hold in anticipation of and disagreements over a general development plan for the Mammoth area. Brett also suggested a museum system that would entail erecting branch museums in other park locations and hiring interpreters to staff them.

The first official mention of a museum in Yellowstone was in 1919. In his report to the Secretary of the Interior that year, NPS Director Stephen Mather noted that a room in one of the former Fort Yellowstone buildings had been developed into a museum, and that specimens were being prepared for exhibit. In 1920, Mather called for the “early establishment of adequate museums in every one of our parks,” to include space for a good collection of library books relating to the park. The NPS partnered with the American Association of Museums, with funding from the Laura Spelman Rockefeller Memorial, to develop model museums in Yellowstone, Yosemite, and Grand Canyon National Parks. By 1922, today’s Albright Visitor Center building, formerly the army’s bachelor officers’ quarters of Fort Yellowstone, hosted botany and paleontology exhibits, and geological specimens and animal heads were mounted on the walls. From then until today, the visitor center has housed a museum collection, although space and visitor access were concerns as early as 1924.

For a brief period in the 1920s, the park’s first branch museum, the “Buffalo Jones museum,” interpreted the history of bison conservation in the park. It was operated at the site of today’s Mammoth corrals, in conjunction with an equally short-lived wildlife zoo and the popular bison show corral. Between 1928 and 1930, the park opened branch museums at Old Faithful, Madison Junction, and Norris Geyser Basin in partnership with the American Association of Museums. The Fishing Bridge Museum opened in 1931.

Mary Meagher, retired research biologist, was museum curator from 1959 to 1968. By her own account, she was “cursed with a housekeeping mind,” and as curator, she overhauled the museum collections, recataloging everything, recording missing items, deaccessioning items, and refiles the library the way a biologist would. According to Meagher, in the early 1960s, Jack Ellis Haynes, son of early park photographer and concessioner Frank J. Haynes, proposed a building in the park to house the collections. Jack grew up in the park, and became a writer, photographer, and concessioner in his own right. He wanted some of his huge collection (which was not all park material) to come to Yellowstone, but stipulated that the park provide a facility with proper environmental controls and security. Yellowstone could not meet his conditions, and instead, his collections went to various institutions, including the Montana Historical Society in Helena, Montana, and Montana State University Special Collections in Bozeman, Montana. It was about this time, and in large part through the



Aubrey Leon Haines, August 30, 1914–September 10, 2000.

work of Aubrey Haines, that Yellowstone’s records began to receive the attention they deserved.

Aubrey Haines Picks Up the Pieces

No mention of Yellowstone’s collections can be made without acknowledging the extraordinary contributions of Aubrey L. Haines, who wrote what is considered the most important history of the park, *The Yellowstone Story*, which is still widely used today. Haines also wrote many other invaluable books, articles, reports, and writings on the park. Haines graduated from the University of Washington with a degree in forestry engineering, and in 1938 accepted a ranger position in Yellowstone. He always had a natural interest in history. After serving four years as a topographic surveyor in the U.S. Army Corps of Engineers during World War II, he returned to Yellowstone in 1945 and quickly became the park’s assistant engineer, but soon left again to professionalize his engineering background by earning an MS in forestry from the University of Montana in Missoula. While there, he also took many history courses. He then returned to the University of Washington and worked toward a doctorate, while at the same time editing early Yellowstone area wildlife trapper Osborne Russell’s *Journal of a Trapper*. In June 1956, Haines returned to Yellowstone for the same engineering position he had left in 1948. In 1960, Superintendent Lemuel A. Garrison, who felt the park needed a historian and was aware of the need for a centennial history

of the park, transferred Haines into a position as the park's first official, dedicated historian.

Both before and after Haines, there were other park staff, generally naturalists or seasonal employees, with historian duties. Past park historians Tony Dean, Tim Manns, Tom Tankersley, and Paul Schullery made great improvements to the collections, and Tankersley added many records to the archives. Yet after Haines retired in 1969, it wasn't until 2003 and Lee Whittlesey that the park again filled a permanent full-time historian position.

The Yellowstone Story, which had started as a hobby and collaboration between Jack Ellis Haynes and Haines, became part of Haines's job after Jack's death in 1962. Haines also began the process of assembling the park's administrative record, and it is in large part thanks to him that the park's scattered archival materials were collected, consolidated, and, consequently, protected from neglect and loss. In a letter to Paul Schullery, Haines gave this account of his archives collecting:

"The bulk of the boxed incoming correspondence was found in the first-floor washroom of the old Administration Office.... There, the boxes were stored on a high shelf above the john. It is my understanding that former Supt. Edmund B. Rogers had the boxes placed there after he had snatched them back from the Mammoth dump where they were to be burned. Several boxes show some scorching and I have always wondered if some did go up in smoke."

In a 1998 interview with *Yellowstone Science*, Haines described his efforts to build upon the small museum collection that existed in the Mammoth Visitor Center from the 1920s on. It was he who recognized the uniqueness and significance of the park's military records as the only surviving records (Yosemite National Park also experienced army occupation and had similar records, but they were hauled to the dump and burned) of the army as a civil governing agent (the army is not meant to govern in the U.S. in times of peace). He set about saving them.

"I let it be known that I was interested in the old records, and they came in from all around.... So I gathered it all together and called it a Yellowstone archive, and it makes me happy to know that this unique collection is now a unit of the National Archives."

NARA

Yellowstone is the only NPS site that has reached an agreement with the National Archives and Records Administration (NARA) to have the park's archives granted affiliated status: a testament to their significance. This means that although many of the park's official records, the historic photograph collection, video and audio tapes, maps, and drawings are accessioned holdings of NARA, the park retains physical custody of them rather than sending them to a records center in accordance with

federal procedures. This agreement was formalized in 1978.

Discussions between NARA and the National Park Service over the Yellowstone Archives began in the mid-1970s, when NARA learned of the significance and extent of the park's record collection and expressed a strong interest in taking it from the park. In the ensuing dialogues and debates between the two agencies, both Haines's great accomplishments in saving the collection and the numerous remaining shortcomings in the park's management of the collection were highlighted. It became clear that if the archives were to stay in the park (as key park staff believed they should), the care and storage of the material would need professionalizing.

Yellowstone Superintendent John Townsley (1975–1982), with a long family history in the national parks and a deep interest in the agency's history, championed keeping the archives in the park. He successfully located the million-plus dollars needed to overhaul the Mammoth Visitor Center, creating an acceptable storage facility to meet NARA standards for environmental controls and a halon fire-suppression system. A storage vault was constructed in the visitor center basement to house the archives, with professional shelving and map storage. Other storage upgrades brought the facility into accord with NARA requirements. Library and museum storage were likewise upgraded significantly. The interpretive elements of the visitor center were also remodeled during this same period, and a stronger emphasis placed on cultural resources and history in the new exhibits. The building was rededicated as the Horace Albright Visitor Center on September 19, 1979.

In large part, the park's agreement with NARA was finally reached because the park successfully argued that staff couldn't meet management goals and the demands of outside researchers without having its records available on site. Park projects often involve fieldwork as well as research in the archives, and the ability to achieve both in the park is an opportunity cherished by both staff and researchers.



PAUL SCHULLERY

In 1976, Richard Russell, then NPS archivist for the Harpers Ferry collection, came to the park. He and Paul Schullery overhauled the archives's storage box system. Records were moved from old, army-era file boxes and cardboard cartons into Hollinger acid-free boxes, a significant improvement.

The agreement requires that the park's records be managed and cared for under NARA's standards, and made available to the public. The NPS must provide trained professional staff to care for and manage the archives. The park currently has a term (four-year position) archives specialist, Harold Housley, who has worked in Yellowstone's archives since 1999. In the past, the park has had a permanent full-time archivist on staff; Lee Whittlesey held that position from 1997 to 2002.

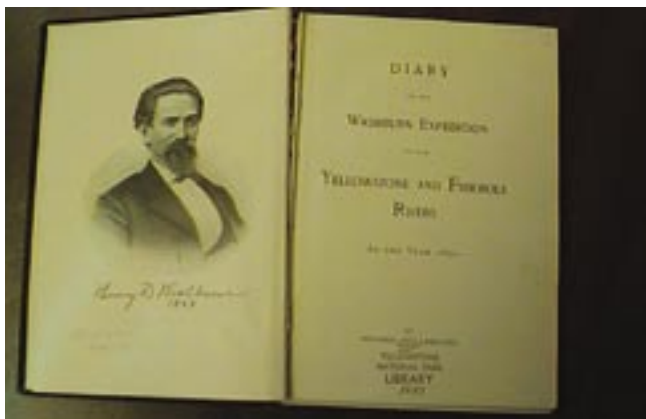
Other collections staff currently include a permanent full-time supervisory museum curator and a historian. Full-time librarians are currently funded by the Yellowstone Association. In addition, term and seasonal museum, archives, and library technicians work on special projects as funding allows, and are assisted by an assortment of volunteers, interns, and Student Conservation Association resource assistants.

The Collections Today

Today, Yellowstone National Park's collections consist of the museum, archives, and research library. The museum collection includes more than 300,000 objects, cultural artifacts, and natural science specimens and their data from disciplines that include history, archeology, ethnology, biology, botany, geology, and paleontology. There are wildlife specimens of park fauna including study skins, taxidermic mounts, insects, reptiles, and amphibians; a herbarium of park flora; rocks and minerals; vertebrate, invertebrate, and botanical fossils; Native American artifacts; historic vehicles; historic hotel furnishings, souvenirs, and ephemera; original works of art; postcards; and more than 90,000 historic photographs and negatives. (*For more details on some of the weird and wonderful pieces in the collection, see the sidebar, "What's in There?"*.)

Some of these objects are exhibited throughout the park in visitor centers and museums; the rest are now in the HRC. Thousands of other objects reside in universities and museums throughout the U.S. and abroad (Table 1 lists some of these repositories), including items such as soil samples, geologic

(continued on page 14)



Nathaniel P. Langford's 1905 reconstructed account of the 1870 Washburn expedition to the park.

Table 1. Some Other Repositories Containing Yellowstone National Park-related Collections

- Autry Museum of Western Heritage:** Fred Rosenstock Collection, Los Angeles, California (photographs, poster art, general West)
- Buffalo Bill Historical Center:** McCracken Research Library, Cody, Wyoming
- California Museum of Photography:** University of California—Riverside, Riverside, California (Keystone-Mast Collection of approx. 350,000 glass-plate stereoscopic negatives and photographs taken from 1890 through 1935. Includes many Yellowstone images once owned by the Keystone View Co.)
- Curt Teich Postcard Archives:** Lake County Discovery Museum, Wauconda, Illinois
- Gallatin County Historical Society:** Pioneer Museum, Bozeman, Montana
- Library of Congress:** Prints and Photographs Division, Washington, D.C.
- Minnesota Historical Society:** St. Paul, Minnesota (Northern Pacific Railroad archives)
- Montana Historical Society:** Photograph Archives, Helena, Montana (Haynes Foundation Collection of original photographic negatives by F. Jay and Jack Ellis Haynes, former official photographers of Yellowstone National Park)
- Montana State University:** Renne Library, Special Collections, Bozeman, Montana (Haynes Family collections, including research files and business records of J.E. Haynes; David Pierson papers (Lamar Buffalo Ranch); Gustavus C. Doane papers; Victor Chestnut papers, containing original transcript of diary from Folsom-Cook Expedition)
- Museum of the Rockies:** Montana State University, Bozeman, Montana (photographs, ephemera, artifacts, fossils)
- Museum of the Yellowstone:** West Yellowstone, Montana (wildlife, history, transportation)
- National Archives and Records Administration (NARA):** Still Picture Reference, Special Media Archives Services Division, College Park, Maryland (paper records from Yellowstone National Park; William Henry Jackson and U.S. Army photographs)
- National Park Service:** Harpers Ferry Center, Office of Library and Archival Services, Harpers Ferry, West Virginia
- Old West Museum:** Cheyenne, Wyoming
- Union Pacific Railroad Museum:** Council Bluffs, Iowa (Union Pacific Railroad photographs, publications, artwork)
- U.S. Geological Survey:** Photographic Library, Denver, Colorado (William Henry Jackson & J.K. Hiller photographs, USGS Yellowstone work: 1890–1950)
- University of Chicago:** Dept. of Botany, Chicago Special Collections: "American Environmental Photographs, 1931–1936" (Photographs from 1926 International Congress of Plant Sciences Western Field Trip)
- University of Wyoming:** American Heritage Center, Laramie, Wyoming, and Hebard Collection, Laramie, Wyoming
- Western Reserve Historical Society:** The Crawford Auto-Aviation Museum, Cleveland, Ohio (photographs and vehicles)
- Wyoming State Archives:** Barrett Building, Cheyenne, Wyoming (photographs by Haynes, Stimson, Jackson, and others)
- Yale University:** Manuscripts and Archives, New Haven, Connecticut (George Bird Grinnell Papers), and Western Americana Collection, Beinecke Rare Book & Manuscript Library, New Haven, Connecticut
- Yellowstone Gateway Museum of Park County:** Livingston, Montana (photographs, artifacts)
- Yellowstone Historic Center:** West Yellowstone, Montana (photographs, documents)



What's in There?

Yellowstone's museum collection contains many unique, rare, and irreplaceable items. It also contains some weird and wonderful things. In the past, park visitors were not generally invited to view the collections due to the museum's limited space and sub-standard conditions. With the completion of the HRC, the public will be able to view some of the collection's treasures for the first time. The HRC has 1,600 square feet of exhibit space—something the park never had before. The Yellowstone Park Foundation funded a \$55,000 grant called "Wonderland on Exhibit" so the park could purchase exhibit cases for these areas in order to showcase various parts of the collections on a rotating basis, probably every six months.

The first exhibit will include parts of the Susan and Jack Davis Collection, much of which has never been seen by the public. This collection is the



A wooden trail marker.

museum's largest acquisition, containing more than 20,000 pieces, including several rare souvenir pieces such as Limoges china and coated specimens, procured in 2001 with the assistance of the Yellowstone Park Foundation. Thanks especially to this acquisition, the park also has one of the most comprehensive collections of Yellowstone National Park postcards in the world. Early souvenir collections will also be showcased, as well as portions of the photograph archives, some original Thomas Moran water-



Saddles from the U.S. Army's time in the park, and some NPS regulation saddles.

colors, and furniture from various park hotels. Historic vehicles will also be exhibited on a rotating basis in the HRC lobby.

Some of the most unusual items in the collection are the early park



This large relief model of the park once resided in the lobby of the Grant Village Visitor Center.



A pottery bean pot from the Divide backcountry cabin.



This circa 1910 hand-painted Limoges bowl depicting the Lower Falls is part of the Susan and Jack Davis Collection.



A 1913 clawfoot tub from one of the park's hotels.



A drawer full of early park souvenirs.



U.S. Army Cavalry sword used by General George Anderson.



These coated specimens were early park souvenirs.

souvenirs covered with travertine. In the 1880s, Ole Anderson set up wooden coating racks in the flowing water of the Mammoth Hot Spring's terraces. Visitors could drop off or purchase an item to place on the racks. Then they toured the park, usually for five days, and as they did, their items became coated with travertine from the run-off, ready for collection upon their return to Mammoth. One of the most remarkable of these coated specimens is a straw hat. The collections also include interpretive signs that were burned or damaged during the 1988 fires as a powerful reminder of that important part of the park's history. One of the weirdest items in the collections is a perfectly level table, one of whose legs was snapped off and replaced with a deer's leg bone.

Some of the most significant items in the collections are also the most valuable, including the Thomas Moran watercolors and the collection of historic park vehicles. The

Moran watercolors are one-of-a-kind sketches he produced while part of the 1871 Hayden expedition. They include his pencil notes describing the

colors. Other wonderful items include the more than 90,000 historic images in the photograph archives, which document the park's natural and cultural history, and the large collection of Yellowstone souvenirs. There is also the earliest known written account of a visit to the park. In 1826, Daniel T. Potts wrote a two-page letter to a friend back East, mentioning his excursion to the area and his visits to the Yellowstone River, Yellowstone Lake, and geysers. This letter appeared in a Philadelphia newspaper, and was also probably the earliest written account of Yellowstone's thermal features ever published.



A decorated Native American spoon with a bowl made of horn.



A wood stove from Fishing Bridge, probably from staff housing.

specimens, thermophilic microorganisms, insects, plants, and wildlife specimens. In the early days of the park, explorers and researchers collected many of these items and often gave them to outside repositories, such as the Smithsonian's National Museum of Natural History, but many items were kept in personal collections as well. Today, items collected by researchers must be reported to the park, and they remain federal property. They are accessioned into the museum collection or loaned to a designated repository at the park's discretion.

The archives contains nearly 3,000 linear feet of documents. Records are grouped into 13 series representing various park administrations and concessioners, such as the U.S. Army administration from 1886–1916, the NPS from 1916 to today, the Yellowstone Park Company (a park concessioner) from 1900–1980, and records from the 1988 fires. The archives also contain park-related ephemera, oral histories, audio and videotapes, and historic film footage. There are hundreds of fascinating documents tucked away in the archives, including many letters bearing original signatures by Theodore Roosevelt, George Bird Grinnell, John Yancey, Philetus W. Norris, and others prominent in Yellowstone history, as well as the original handwritten logbooks and scout's diaries kept by the U.S. Army as they patrolled the park.

The research library contains more than 20,000 volumes covering all aspects of the park and its history, including periodicals; theses and dissertations; manuscripts; maps; microfilm; videos; drawings; weekly, monthly, and annual reports by the park superintendent and various divisions; and a rare book collection. The rare book collection includes such treasures as Ferdinand V. Hayden's 1872 *Preliminary Report of the United States Geological Survey of Montana, and Portions of Adjacent Territories*, which was the first published report on Yellowstone documenting his 1871 expedition. In 1998, Dean Larsen of Provo, Utah, donated William Strong's 1875 *The Yellowstone*

and the Great Geysers to the park. Only about 12 copies were made, but this book is one-of-a-kind, as it was Strong's personal copy and includes letters from General Philip H. Sheridan and others that were bound into it. Carl E. Schmidt's 1910 *A Western Trip*, an account of a trip to Yellowstone in fall 1901, also resides in the collection, which continues to grow. The park acquires on average 1,000 items for the collections each year that staff must conserve and interpret.

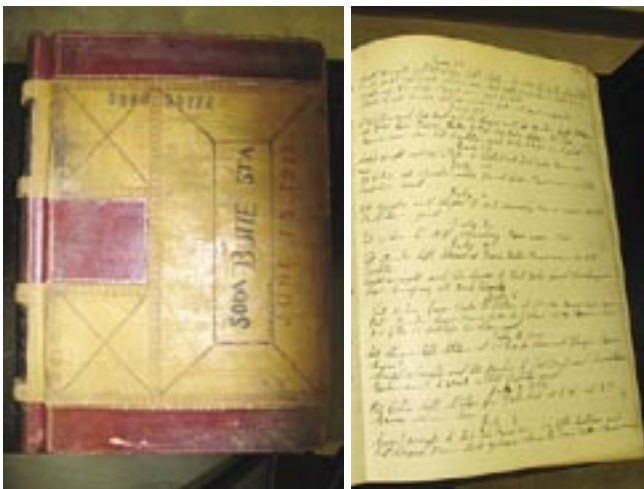
It is important to remember that all of this was housed in the basement of a nearly 100-year-old building in less than 3,000 square feet of space, with overflow recently housed in eight other Mammoth and Gardiner area buildings. In addition to this appalling paucity of space, the collections' former home, never designed to house a modern-day museum and archives, was also prone to occasional accidents (*see sidebar "Some Near Disasters"*).

Planning for a New Facility

As the collections continued to outgrow their space in the Albright Visitor Center basement, both in terms of room for items and researcher work space, the facility also became the subject of a 1989 on-site audit by the Office of the Inspector General. The audit found many serious deficiencies in the park's collections storage, including overcrowding; inadequate environmental controls, and security, fire, and flood protection; and high levels of radon. Yellowstone received a citation for the poor preservation conditions of its museum and archives collections, and staff safety became a concern. Laura Joss, as NPS Rocky Mountain Regional curator from 1990 to 1994, pushed Yellowstone throughout her tenure to correct the audit deficiencies.

In 1990, staff made efforts to remedy heating problems, radon levels, and pest infestations, but by 1991, the park had identified the need for an improved collections storage facility. In 1992 and 1993, staff studied the possibility of rehabilitating the Mammoth powerhouse for such a use, as it was no longer used for power generation and had been empty for many years. In 1994, Laura Joss became Yellowstone's first branch chief of cultural resources (1994–2000), and she was immediately tasked with the museum storage facility project. Of great assistance to her throughout the early planning stages were National Capitol Regional curator Pam West and Intermountain Region staff curator Matthew Wilson. That same year, the park selected HRA Associates, Inc., of Missoula, Montana, to provide architectural and engineering services for a refurbished storage building. They subcontracted with historical architect Jim McDonald to perform a study and prepare a report.

In 1995, staff found more badly needed storage space for the park's growing collections, and further addressed some of the deficiencies in the Albright Visitor Center listed in the 1989 audit. Staff revised Jim McDonald's study to include the evaluation of needs for storage, research, and exhibit space,



NPS/HAROLD HOUSLEY

Some of the most fascinating items in the archives are army-era logbooks, such as this one from Soda Butte Station, 1913–1918. They contain soldiers' handwritten accounts of their patrols, including wildlife and weather observations.

Some Near Disasters

In some ways, the park was simply lucky to have safely housed the collections for so many years in the substandard conditions in the Albright Visitor Center. One near disaster for the collections occurred the day after Christmas in 1978. According to Mary Meagher, she received a call from Linda Young, then curator, saying that some pipes had broken and the visitor center basement had flooded. Mary called for help, got master keys, and called the supply office to ask that they collect every wooden clothespin they could find. She, Linda, and Valerie Black ran wet historic photo negatives through a chemical bath and hung them up with clothespins to dry. Wet glass plate negatives were balanced on top of matchsticks at each corner and left to dry. Working like this, they saved almost everything; only one or two glass plates were broken.

On December 24, 1998, just before museum staff left for the day, a water pipe burst in the basement boiler room, right next to the archives. About two inches of water already covered the floor, reaching some valuable records and maps. Rising water threatened the elevated map cabinets and storage units. Staff turned off the water, cleared a clogged drain, and went to work with mops, buckets, a wet/dry vacuum, fans, squeegees, and space heaters. Using blow dryers, staff salvaged some of the damaged materials, but there was some damage to and loss of paper records and maps. After the holidays, drains and pipes were repaired, water alarms were purchased, and staff prepared plans to address future disasters.

On May 23, 2000, a sewage backup in the visitor center pipes overflowed a drain in the archives. Raw sewage and gray water splashed onto and flowed under some shelving and cabinets containing archival materials. Staff were working at the time and rescued the collections, but some storage equipment was damaged. The same day, the rare book room in the library flooded due to a bathroom faucet that had been left open while the water was shut off in the building. When the water was turned back on, it flooded down the walls into the rare book room. Again, staff were present and able to rescue the collections before any damage occurred.



The Horace Albright Visitor Center, home of the collections from the 1920s until 2004.

and the consideration of alternative Mammoth area buildings. The study also drafted plans and projected costs for a brand new facility that would meet the needs of staff, visitors, and researchers. When the study was completed in 1996, the powerhouse option was dropped for lack of size and public accessibility. Staff considered various plans for improved and larger storage areas, but all of the buildings were found to be either too small or too expensive to retrofit. Another idea dismissed in early discussions was the combination of a collections storage facility and visitor center, due to the sheer size necessitated by such a building, as well as funding issues. At that time, there were funding options available for a collections storage facility, but not for a visitor center or a museum. Laura Joss wrote a proposal for a new facility and submitted it to the NPS Line-Item Construction Program. The park contracted with Barker, Rinker, Seacat & Partners Architects, P.C. (BRS) to produce draft designs for a new facility using Jim McDonald's study.

In 1997, staff named the new facility the Yellowstone Heritage and Research Center, and the site being considered for the new building was the "Ice House" site, to the northwest and across the street from the Post Office in Mammoth. All of the areas being considered for the building in the Mammoth area underwent subsurface core testing due to the underlying travertine and the area's seismic activity. Ground-penetrating radar tests were conducted in 1997 through a cooperative project with the University of Montana to determine surface stability and identify the presence of faults or thermal features in these areas. By 1998, architectural drafts of the building were being reviewed. The park also explored funding options with agencies and outside partners as well as the possibility of sharing facilities, but off-site storage was soon considered to be untenable. SK Geological Corporation completed subsurface testing for three possible Mammoth building sites (Ice House, Mail Carrier's Cabin, and the parking lot south of the Yellowstone Center for Resources building), but the sites were found to be either too small, or made up of decomposed travertine, where basement construction is discouraged. The Ice House

site had one area considered to be an excellent building site, and another, comprised of unstable bentonite, to be avoided. There were also growing concerns that such a large building in Mammoth would adversely affect the Fort Yellowstone Historic District.

Yellowstone's funding request to the NPS Line-Item Construction Program was accepted in 1999, setting up the park to receive funding for construction in 2002. Detailed planning therefore began in earnest, with Native American consultation and discussions with area museum partners on alternative sites and building designs. Sites under consideration at this point were the Ice House site in Mammoth, Gardiner depot, and Gardiner gravel pit. Throughout the planning process, the park considered approximately 25 sites or buildings that could have been adapted for use.

Museum curator Susan Kraft (1994–2003), took over the project after Joss left to become Superintendent of Fort McHenry National Monument in 2000. That year, the Gardiner gravel pit site was chosen for its stable subsurface as well as for its ability to accommodate the size and future expansion of the HRC. The park commented on preliminary building designs, and then chose CTA Architects of Billings, Montana, for architectural and engineering services. Staff decided to phase in the building program, as the available line-item construction funds would not cover all long-range costs, and Phases II and III were postponed. Staff revised and submitted proposals to fund the remaining phases to the Yellowstone Park Foundation and the Save America's Treasures program. The regional curator from the NPS Capital Region and one of the nation's top environmental engineers advised the park on space needs and environmental requirements for the new building. Late in the year, Sue Consolo Murphy became the next branch chief of cultural resources (2000–03), and continued overseeing cultural resource staff input into finalizing plans for the building's design.

In 2001, the NPS Development Advisory Board approved \$6.1 million in NPS line-item construction funds for the first phase of construction in 2002, and some funds were immediately available for planning. Regional curators and NARA representatives reviewed preliminary designs. The environmental assessment (EA) was released in early 2002, and the park held a public open house in Gardiner, Montana, to collect comments on the EA. Staff from all park divisions, and many other interested parties, such as the Montana State Historic Preservation Office, were involved in the planning process. Comments received included support for the new building, and interest in more displays of the collections. One commenter wished that more of a museum had been planned. Some comments, though, expressed concern about the size and look of and lighting for the building, as well as its location close to the school and wildlife habitat. (*See sidebar, "Why Does it Look Like That?"*.) The building is located in pronghorn habitat that was disturbed and is being revegetated for a net positive gain.

The HRC's Design and Construction

The design of the HRC building is vaguely reminiscent of the National Archives in College Park, Maryland, especially in the picture windows and overall warehouse look. In the National Park Service, there are no other buildings that are comparable in either appearance or purpose. The Western Archeological and Conservation Center just moved into a large building that is one of the newest in the NPS; however, they rent the space. The Museum Resource Center in the National Capital Region also has a large, new facility with state-of-the-art storage like the HRC. However, the HRC is one of the largest such facilities in the NPS and will most likely be used as a benchmark for other parks with large collections.

The functions of the HRC are twofold: to properly warehouse the collections, and to provide space for academic pursuits. Therefore, it was designed to evoke the sense of both a storage and a research facility. The inspiration for the design came from the turn-of-the-century Yellowstone Park Transportation Company buildings in Gardiner, although the HRC's design is purposely more academic. This mix of architectural designs is intended to help the public avoid confusing the building with a visitor center or lodging facility. Exterior materials were selected to be durable and low in maintenance, and to infuse the building with a sense of history and longevity common to significant NPS structures. The basalt stone veneer was designed to link the building to the nearby Roosevelt Arch, which is also made of basalt, and the Arch Park pavilion. Designs took advantage of the contours of the gravel pit site, so the HRC appears to be only two floors from the front, but three from the back.

The building was designed and constructed to be sustainable and energy efficient, incorporating passive solar heat. Environmental sensitivity was emphasized during construction, including resource conservation, recycling, and the use of non-toxic materials. Whenever possible, the products used were recycled, low in volatile organic compounds, minimum energy, and durable. The plumbing system was designed to

(continued on page 18)



NPS/VIRGINIA WANNER

The cantilevered devices over the windows provide two functions. They screen the glass from the high summer sun so that the interior spaces do not overheat. They also bounce natural daylight off a reflective top surface deeper into the building, so there is less demand for artificial light during normal working hours.



PHOTOS THIS PAGE MRS. VIRGINIA WARNER

Why Does it Look Like That?

Change is often difficult to accept, and unsurprisingly, not everyone is thrilled with the placement and look of the HRC building. It has stimulated considerable discussion among local residents and frequent visitors to the park. The building dwarfs most other Gardiner area structures. It is too far removed from its intended architectural context, the 1930s art deco concessioner warehouses that inspired its design, to achieve any visual harmony with those buildings. (That connection can be realized as one is leaving the park via the Roosevelt Arch. The HRC is seen in the distance while the Yellowstone Park Transportation structures are off to the right.) The back side of the HRC, seen from the approach to the park on U.S. Highway 89, appears taller than the front due to the contours of the site, and is essentially a blank wall. All of this leaves many to wonder, “Why does it look like that?”



First, and simply, the HRC had to be big in order to provide adequate space for the park’s collections, and it was determined that it was better to gain square footage by going vertical rather than choosing a more sprawling, low-rise building. Second, the HRC is more of a warehouse than a museum—and so that’s more what it looks like. Finally, in the original designs, the open spaces on the backside of the building were intended to display ceramic mosaic tiles in Yellowstone National Park-related murals, for the purpose of breaking up the mass of the building. For various reasons, this idea was dropped, leaving the back of the HRC rather plain and tall; however, the sandstone color of the building blends in well with the Gardiner area landscape, adding an aspect of camouflage to the facility.

On the other hand, one can’t miss the fact that the HRC is located so that it is framed by the Roosevelt Arch—



a cultural icon in and of itself—as one exits the park. Whether or not you appreciate this placement depends on your point of view. The HRC façade is intentionally placed on an angle, not directly perpendicular to the axis of the view through the arch, to make it seem less prominent. In the recent past, that viewshed included bright yellow school busses, an old gravel pit, oil tanks, and road construction materials and equipment, along with the more distant sagebrush hills and mountains—a more open, natural view. But although Yellowstone is in large part a “natural” park, set aside for its renowned geothermal features, Yellowstone’s cultural history as the world’s first national park is also of great importance to the world. The HRC protects and preserves the history of “the idea” itself, as well as the many things themselves, both natural and cultural in origin. Love it or hate it, the importance of this facility to the preservation of Yellowstone’s collections cannot be overstated.



Large chains hang from the roof all the way to the ground, an efficient way to move water off the roof without creating hazardous waterfalls. Chains are also incorporated into the building’s interior (shown above).

use low water consumption fixtures. The lighting is primarily fluorescent and moderated by sensors, and exterior lighting is sensitive to light trespass and Night Sky initiatives. Of course, the facility also has high-level security and alarm systems. The entire building is protected by a fire sprinkler system where each sprinkler is individually activated by heat, and there is a two-hour rated firewall around the archives stack area, the rare book room, and the map room. There are two hook-up points to the water supply to reduce the possibility of a loss of water for the fire suppression system.

The HRC was designed in two horizontal zones, with the collections stored in the northwest of the building in spaces with no windows, away from direct sunlight where the temperatures are cooler and more stable, thereby minimizing the demand for mechanical heating, cooling, and humidity control. Spaces benefiting from natural sunlight and solar heat, including staff offices and people spaces, are located on the southeast side, with interior office windows placed to take advantage of natural daylight. Exterior windows are double-pane glass with low-E insulating glazing to reduce radiant heat gain and building heat loss, and to screen UV light. In summer, exterior solar screens shade the windows to reduce heat gain. The southeast corridor is a passive solar heat collector through its large windows, and its flooring is dark gray-brown porcelain tile with high thermal mass. The HRC's complex heating, ventilating, and air conditioning is accomplished by a water source heat pump, which ensures the proper humidity, temperature, and environmental requirements of the collections. This is a single pipe design, as opposed to the more conventional two pipe design, where supply water and return water are in separate pipes, so the heat pump system in the HRC uses half the copper pipe of conventional heat pump systems. This system also redistributes collected heat throughout the building, as well as storing it as hot water in an underground tank for later distribution.

The building is also designed vertically, with support spaces on the lower floor for processing incoming items, mechanical and electrical rooms, a staff break room, and a conference room. The archeologist work spaces are located adjacent to the delivery dock due to the heavy and often dirty nature of archeology materials. The main floor includes the HRC's main



Shelving had to be purchased, assembled, installed, and cleaned before anything could go on it.

entrance, lobby, herbarium, and museum spaces, including the curatorial work room and collections storage, cold storage, and walk-in freezer. The third floor houses the library, where barrel vault skylights filter natural light all the way down into the lobby exhibit spaces. Artifacts enter through the lower-level delivery dock, and after a quarantine period are cleaned and accessioned, processed, cataloged, and then moved upstairs by elevator to storage. The quarantine period allows staff time to examine each item for mold and pests, such as silverfish and webbing clothes moths. If any are found, the item is wrapped in polyethylene sheeting and placed in the freezer. Once the freezing period is over, the item is returned to quarantine to be monitored for any further evidence of the infestation. Once the item is determined to be clear, it goes upstairs to its designated storage area. By cataloging everything in the processing rooms, staff hope to bring an end to the cataloging backlog.

Dick Anderson Construction of Helena, Montana, won the bid for construction, and groundwork began in October 2002. Construction was completed in spring 2004, and costs came to \$6.1 million in NPS line-item construction funds, with change orders that brought the total to \$6.4 million. Park engineer John Stewart, project manager for design and construction, was presented with an award for keeping the project on track and for his work to meet the many and detailed concerns of curatorial professionals.

Moving the Collections

Roger Anderson, first as acting and now as branch chief of cultural resources, shouldered the furnishing of the HRC as well as the move, along with museum curator Colleen Curry who came to Yellowstone in spring 2003. Although some items had been purchased and many funding requests had been submitted, this shiny new facility was almost completely bereft of furnishings and collections storage units, much of which had to be procured, installed, and cleaned before anything could be moved. Fortunately, some funding came in from project proposals, and many of the park's partner organizations came to the rescue. The Yellowstone Association supplied more than \$109,000 in 2004–05 to furnish offices and work spaces,



Some YNP museum, library, and archives staff: Back row: Harold Housley, Steve Tustanowski-Marsh, Maria Cappozi. Middle row: Tasha Felton, Bridgette Case, David Amott. Front row: Tara Cross, Jessi Gerdes, Colleen Curry.

provide supplies, and staff the HRC with librarians. The Yellowstone Park Foundation sponsored the “Furnishing our Heritage” project, which provided the park with \$90,000 to furnish the library spaces. Another large contribution came to the park’s aid in the form of a bequest to Yellowstone from the Jean Mercer estate, which had set up the Mercer Endowment through the National Park Foundation. Yellowstone requested \$90,000 from the endowment to assist with preventive maintenance of the park’s archives and museum collections. The funds supported the purchase of specimen, art, map case, and visual storage cabinets, and a condition survey of the furniture collection, much of which is still in use in concessioner facilities throughout the park. Canon, USA, Inc., also pitched in with their “Moving the Memories” project, which donated \$40,000 to the park for the purchase of modern cabinets to properly store and access the historic photograph collection, which includes photos, negatives, postcards, and other images. In all, more than \$300,000 was donated.



A water jug, packed for moving.



Ella Ross, archivist at Shenandoah National Park, demonstrates how to wrap furniture for moving.



Alice Newton, left, shows others how to pack and house museum objects.



Suited up in Tyvek and respirators for working near arsenic-laden natural history specimens.



Jason Wolvington of the University of Kansas wraps a bear trap for moving.



Boxes had to be built for many items in order to achieve the specific sizes needed to protect objects.

Planning for the move was a colossal affair, and relocating the collections to the HRC was the largest NPS collections move ever undertaken. The Yellowstone Association provided funds to draw up a detailed collections move plan, and provided staff to assist with pre-move inventories. Access to the collections was restricted in October 2003 in order for staff to perform a 100% inventory, which involved checking the location of each catalog item, correcting locations, and

reporting missing objects. Curator Colleen Curry and Alice Newton, Harpers Ferry museum registrar, worked to develop a plan where NPS archivists and curators from sites all across the country participated in the move (Table 2), not only to show their support for Yellowstone, but also to gain experience for their own upcoming collections moves. (Similarly, Yellowstone museum and library employees traveled to Tucson, Arizona, in 2003 to help with the NPS Western Archeological



The library—packed, palletted, and ready to move.



Alice Hart of the University of Kansas and Maria Capozzi unload objects arriving at the HRC.



Harold Housley and Steve Tustanowski-Marsh move the flammable materials cabinets.



Once things were packaged and moved to the HRC, they were unpacked and put away just as carefully.



Mergenthaler moved the Shaw and Powell safe with the help of Kelly McAdams of Xanterra, who operated the forklift.



Furniture in the museum storage room waiting to be placed on pallet racks.

Conservation Center's move, where they gained valuable training and surplus moving supplies, and made important contacts.) With Curry's assistance, Alice Newton spent 12 weeks, June 2 through August 17, training and organizing five teams of 10 people each in proper moving and packaging techniques. A senior archivist from NARA identified Yellowstone's plan as a template that other sites may wish to emulate for their own collections moves.

With the help of these teams, student interns, many volunteers, and professional movers including Mergenthaler from Bozeman, Montana, museum curator Colleen Curry and her staff moved more than five million objects from Mammoth to Gardiner. According to cultural resources branch secretary Maurine Hinkley-Cole, who assisted in the move, "they treated each object as if it were the most important historic artifact in existence, cherishing each thing as part of the great story of our park and our past." Each item was carried to a table, cleaned, wrapped in archival

(continued on page 23)

Table 2. List of HRC Moving Team Affiliations

(see map below)

- | | |
|---|---|
| 1. Alaska Support Office, Anchorage, AK | 17. Midwest Archeological Center, NE |
| 2. Allegheny Portage Railroad NHS, PA | 18. NPCA board member, Atlanta, GA |
| 3. Andersonville NHS, GA | 19. Olympic NP, WA |
| 4. Arlington House, Robert E. Lee Memorial/George Washington Memorial Parkway, VA | 20. Park City Historical Society Museum, Park City, UT |
| 5. Cane River Creole NHP, LA | 21. Petersburg NB, VA |
| 6. Chaco Culture NHP, NM | 22. Salem Maritime NHS, MA |
| 7. D.C. Booth Historic National Fish Hatchery, SD | 23. San Francisco Maritime NHP, CA |
| 8. Death Valley NP, CA | 24. San Juan NHS, Puerto Rico |
| 9. Everglades NP, FL | 25. Sheldon Jackson Museum, Sitka, AK |
| 10. Flagstaff area National Monuments, AZ | 26. Shenandoah NP, VA |
| 11. Frederick Law Olmstead NHS, MA | 27. Sitka NHP, AK |
| 12. George Washington University, Washington, D.C. | 28. Southeast Archeological Center, FL |
| 13. Grant-Kohrs Ranch NHS, MT | 29. Southeast Regional Office, GA |
| 14. Harpers Ferry NHP, WV | 30. Statue of Liberty NM, NY |
| 15. Intermountain Regional Office, Denver, CO | 31. Steamtown NHS, PA |
| 16. Joshua Tree NP, CA | 32. Timucuan Ecological & Historical Preserve, FL |
| | 33. University of Kansas Natural History Museum and BioDiversity Center, KS |
| | 34. Valley Forge NHP, PA |



MAP BY SARAH STEVENSON

Before

After

The days of doing research in the tiny, cozy basement of the Albright Visitor Center are over. Gone are those summer days of seeing researchers working on every available surface, including staff desks, the floor, and even outdoors. Research in Yellowstone's library will now be more of a National Archives experience, with security, good lighting, and nice wooden workstations. For some, this will be a welcome change. Others may be a little nostalgic for the way it used to be.



The librarians' desk and reading room.



The library stacks and the archivist's desk.



The rare book "closet."



NPS/VIRGINIA WARNER

The HRC librarians' desk and reading room.



NPS/VIRGINIA WARNER

The HRC library stacks.



NPS/VIRGINIA WARNER

The HRC rare book room.

Before



The archives.



Map storage.

tissue, bubble-wrapped, taped, and boxed. The Yellowstone Association provided the funds for most of these packaging materials. Box-spacers and archival boards were cut to exact specifications as needed to ensure that nothing was broken on its trip down the hill to Gardiner. There, the team at the HRC unwrapped and stored each object just as carefully—another 100% inventory will be completed this winter. Amazingly, nothing was broken, stolen, or lost during the move.

The HRC Today and in the Future

During an early tour of the HRC, archives specialist Harold Housley recalls engineer John Stewart stating that he thought the building would be a great place to work. According to HRC staff, this is not only true, but some even feel slightly euphoric when they enter the building. The HRC physically represents the progress that has been made and the respect for and understanding of Yellowstone's collections that has been growing for many years.

The HRC will open to the public in spring 2005. In all, the building contains the research library, a map room, and a

After



Archives specialist Harold Housley in the HRC archives, furnished with new, mobile, compact storage units.



The HRC map room, a work in progress. At least 12 more map cases will be ordered for this room.

rare book room; museum and archival collections storage; the herbarium; work space and public reading rooms for visiting researchers; conference and media rooms; lobby space for rotating exhibits; and archeology, paleontology, and geology laboratories. The offices of some Yellowstone Center for Resources staff are now located in the HRC, including museum curator Colleen Curry, archeologist Ann Johnson, historian Lee Whittlesey, writer-editor Paul Schullery, botanist Jennifer Whipple, archives specialist Harold Housley, and various librarians and technicians.

Upon its opening next spring, Yellowstone invites and encourages the public to visit, make use of, and enjoy this new facility. With the improved access and protection that the HRC provides, researchers will be better able to delve into and work on the collections, shedding new light on many aspects of Yellowstone's natural history, history, lore, and role in the world conservation movement. With a clearer understanding of and appreciation for the past, we will be better prepared to improve the future.

YS



BILL BLACKFORD

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The building itself is largely a legacy of Yellowstone Center for Resources director John Varley. He championed this project from the beginning, and it was he who put



Bridgette Case and Tasha Felton in cold storage, where the park's collection of more than 90,000 historic images is stored.



Kelly Rushing, George Washington University intern, displays the Morans in their new art cabinet.

the "Research" in the "Heritage Center." The value of Paul Schullery's and Lee Whittlesey's long and ongoing work to make accessible and share the park's history with the public is immense. Credit and thanks goes to all the many curators, historians, archivists, and librarians not mentioned here, who worked hard for the collections over the years; it shows. Without the care and passion of many people, we could not enjoy the collections as they are today.

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