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The Unheralded Resources of Golden Spike National Historic Site

olden Spike National Historic Site was established in 1965 at Promontory Summit, Utah, to commemorate completion of the world's first transcontinental railroad and the consequential, far-reaching effects of that act. This is considered to be among the most important events in the nation's history. The park celebrates the May 10, 1869, joining of the rails built by the Central Pacific and Union Pacific railroad companies. However, the paramount historical significance of the completed railroad is its effect upon the American far west, bridging the vast, unknown spaces of the great American desert and uniting east and west. It resulted in decimation of the American bison and changed forever western Native American lifeways. It opened to the world the great western lands of the United States, hastening the establishment of western territories and states.

Famous "Champagne Photograph," Promontory Summit, Utah, celebrating completion of the first transcontinental railroad. Photo by Andrew J. Russell, May 10, 1869, courtesy the Oakland Museum.

When most people think of Golden Spike, they envision a railroad spike made of gold or the May 10, 1869 ceremony captured in the famous Andrew J. Russell "Champagne" photograph. Visitors to the park see the reproduction locomotives, the Union Pacific's No. 119 and Central Pacific's Jupiter. They participate in the May 10th



re-enactment ceremony and see replicas of the last gold and silver spikes driven into the replica last tie of laurel. Most visitors leave the park awed by the locomotives and with some sense of history after seeing the very spot where this most historic event took place. However, they don't often take the opportunity to look beyond the "Last Spike Site" and find the wealth of real, tangible evidence of construction and use of the railroad.

Replicas and symbols aside, Golden Spike National Historic Site is among the very few places where one can see the physical remains of this great, multicultural, cross-country effort. Much has been written about the history of the world's first transcontinental railroad¹ and analyses of its history, economics, technology, politics and political machinations abound.² But, in fact, even without this information, the Golden Spike landscape actually tells the story of the final push to complete the railroad. Here are the remains of the infamous "race" and of the construction techniques employed: incomplete cuts, partially-constructed parallel grades, the Union Pacific's "false cut," terminus of the Central Pacific's "10 miles of track laid in one day," workers' campsites, blacksmithing workshops, and telegraph pole remnants.

Park lands contain dramatic evidence of the infamous parallel grades with their partially-complete cuts, fills, ramps for horse-drawn earthmovers, hand-hammered drill marks, size-graded spoils piles, borrow pits, partially-built stone culverts, and abutments for hastily-constructed trestles. The varied remains of construction worker campsites document the range of conditions under which the workers toiled. There are special function areas, such as blacksmith workshops, that mark the sites of various support industries. These are the character-defining landscape features that, because of their integrity and the integrity of their historic setting, tell the story of one of this nation's major technological accomplishments.

Slaughter House showing construction worker campsite, east slope of the Promontory Mountains. The infamous Union Pacific "Big Trestle" is in the background. Photo by Andrew J. Russell, 1869, courtesy the Oakland Museum

However, tools for understanding these remains are varied. Photographs, taken by "official" railroad photographers during the closing days of construction, document and help explain activities and events for which archeological evidence remains. Railroad records provide information about standardized culvert design, and archeological excavations document that the design was often modified. The illustrations, photographs, and written record, in conjunction with archeological investigations, historic structure



Management of Historic Structures

Golden Spike National Historic Site contains what probably are the best-preserved and among the most important segments and elements of the original 1,776 miles of railroad line completed between Omaha, Nebraska and Sacramento, California. This grade and its associated features were designated a National Civil Engineering Landmark in 1969. Over 17 original stone box culverts and seven original trestle sites with stepped abutments of earth and drylaid stone retaining walls remain. Nine wood culverts, including remains of a wooden stave culvert, and two wood trestles that date from subsequent, historic operation of the Promontory Branch Line still exist along the 15-1/2 miles of parallel construction within the park.

Over time, some of the wood culverts have deteriorated to the point of collapse, making the grade no longer usable and cutting short the visitor experience. To facilitate accurate maintenance of these features, a systematic approach to repair has been developed by the park that involves both archeological excavations and historic architectural documentation. Initial, archeological "test" excavations sufficient to enable a historic architect to develop construction drawings for repair of the culvert are carried out.



Subsequently, with repair materials on hand, the culvert is completely excavated, new information incorporated into the architectural drawings, and the repairs completed in the most historically accurate manner possible. This effort has resulted in documentation of various episodes of past maintenance by the railroad and dating of these events using artifacts and Southern Pacific Railroad date nails that were sometimes incorporated into the structures. Similarly, stabilization of stone culvert headwalls, also accompanied by archeological excavations, has yielded artifacts of significance to the 1869 completion of the railroad. All resultant information is being incorporated into the park's Historic Structure Report.

Archeological Evidence from 1869

At least 17 campsites established by the numerous workers who built the railroad exist within the boundary of the park, each containing a great variety of features that document individual habitation as well as community areas.³ Some campsites, such as depicted in Russell's 1869 "Slaughter House" photograph, contain over 50 individual features that range from small sleeping areas dug into the side of a shallow drainage to very large, community structures assumed to be mess tents or storage facilities. The winter and early spring of 1869 were extremely cold and harsh, and winds whipped across the Promontory Mountains. The need for shelter is reflected in the many features nestled in the lee of imposing limestone outcrops and in the rock-walled dugouts excavated into the hillsides. Most structures, whether they are pit features in the open or rock walled lean-tos, retain evidence of stone hearths and chimneys. In addition to group campsites, there are a number of

individual, isolated features, such as leveled tent or wagon platforms and distinct, special activity structures. Russell photographically documents the use of small rock shelters as individual campsites, the remains of which are obvious today.

Most of these archeological sites and features have not been formally documented, have never been addressed in the abundant literature on the transcontinental railroad, and are not well understood. Consequently, the park has implemented a multi-year archeological inventory project, which is part of the National Park Service Systemwide Archeological Inventory Program. The focus of this effort is to investigate and to develop an understanding of the common workers who actually built the railroad.

NPS archeologist Adrienne Anderson inspecting excavation of collapsed, Southern Pacific wooden box culvert in anticipation of its repair. NPS photo courtesy Golden Spike National Historic Site.



Integrity of Place; Cultural Landscape Evaluation

The numerous historic features that dot the park's landscape have left distinctive and remarkable evidence of a historic event: Indentations left by parallel railroad cuts notch the horizon; long-abandoned trestle abutments silhouette against the sky; and the sinuous, parallel grades snake their way toward Promontory Summit. The ongoing cultural landscape evaluation has documented that the integrity of the setting includes not only the expansive views of the 1869 scene but also the numerous, contributing construction features, historic structures, and archeological remains that document the completion of the world's first transcontinental railroad. These are the unheralded resources that, in fact, tell the story of the first transcontinental railroad and demonstrate the physical efforts of

thousands of men who toiled to make the railroad a reality.

Notes

- ¹ See Daggett 1922, Dodge 1965, White 1895, and Williams 1988.
- ² See Davis 1894, Griswold 1962, Kraus 1969, Lewis 1969, and Trent 1981.
- ³ Adrienne B. Anderson, "Ancillary Construction on Promontory Summit, Utah: Those Domestic Structures Built by Railroad Workers," Forgotten Places and Things, Center for Anthropological Research, Contribution 3 (1981).

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