

Conservation of a Yellowstone Studebaker Wagon

One hundred years ago, visitors to Yellowstone fell into a distinct hierarchy. The “dudes” were the wealthy visitors who arrived by train, traveled by stagecoach, and stayed in grand park hotels like the National Hotel in Mammoth Hot Springs and, later, the Old Faithful. “Sagebrushers” were those with fewer resources, more adventurous spirits, or both, who brought their own vehicles and pitched their tents amid the sagebrush, or virtually anywhere they pleased. Falling roughly in between were the park’s tent campers.

Before the automobile came to Yellowstone, there were two official tent camp companies in the park: the Wylie Permanent Camping Company and the Shaw & Powell Camping Company. Their camps were arrangements of log buildings and brightly-striped, furnished canvas tents. Typical tent camping company patrons included middle class visitors, as well as wealthy tourists who either eschewed the luxuries of the park hotels and wished to rough it a bit, or simply had not been able to obtain reservations for the dude’s tour. These visitors toured the park and moved from tent camp to tent camp in stagecoaches or buggies owned and operated by the two companies.

Today, one of these buggies survives to tell the story of Yellowstone’s tent campers. In the lobby of the Old Faithful Inn stands a vehicle once owned and operated by the Shaw & Powell Camping Company. Last year, it became the first historic vehicle in Yellowstone National Park history to receive professional conservation treatment, and the first to be exhibited indoors. The story of this vehicle’s preservation and conservation begins a new chapter in the history of transportation artifacts in Yellowstone, following a long tradition of displaying retired stagecoaches and other horse-drawn vehicles outdoors, and watching vehicles deteriorate in substandard storage.

An Anniversary Opportunity

In 1997, in conjunction with the 125th anniversary of Yellowstone National Park, Yellowstone museum staff proposed the conservation of a historic vehicle from the museum collection as a 125th anniversary project, and obtained estimates for treatment of several carriages, including the Shaw & Powell. In the end, the Shaw & Powell vehicle stood apart from its competition for its rarity, its obvious need for treatment, the quantity and quality of surviving original fabric, and its unique but untapped potential for interpreting the way in which many early turn-of-the-century visitors—particularly middle class visitors—experienced Yellowstone.

While its competitor, Wylie, operated in several national parks, Shaw & Powell was a small, local business (based in Livingston, Montana) that operated only in Yellowstone from 1898-1916. Wylie vehicles are not common, but Shaw & Powell vehicles are extremely rare. Manufactured by Studebaker Bros. of South Bend, Indiana around 1898, Yellowstone’s buggy is actually a mountain stage, a type of mountain spring wagon. It carried up to 11 passengers and was pulled by two horses. It is the only Studebaker, as well as the only tent camping company vehicle, in the park’s collection.

Little is known of the history of this particular wagon, but much can be surmised from a close examination of the vehicle. Painted on the driver’s box is the number 6, painted over either the number 1 or the number 11. These low numbers suggest that the buggy was probably an early member of Shaw & Powell fleet. The company name had been painted and repainted several times on each side of the passenger compartment, suggesting that the buggy remained in service a number of seasons. The fact that it survived at all strongly suggests that the wagon was still in service when the stagecoach era ended with Yellowstone’s all-motorized 1917 season.

The only photograph known to have been taken of the wagon before its accession into the museum collection is a 1961 snapshot which shows the buggy outdoors at park headquarters in Mammoth Hot Springs. In this photograph, the buggy appears in a state of disrepair similar to that observed when it was finally added to the museum collection in 1993. Its side springs, tongue, most of its roof, and parts of all four seats (including the driver's seat) were missing. As one might expect, given the fact that the buggy spent at least a portion of its retirement years outdoors, virtually all the upholstery and stuffing, as well as the side curtains, were missing. The leather panels that had enclosed the sides of the front boot or storage compartment under the driver's feet had been deliberately sliced out.

When the buggy was accessioned and its condition documented, additional problems were noted. Most disturbing was the fact that the buggy was full of dead leaves, rodents' nests, rodent droppings, spider webs, and other evidence of long-term neglect. Many of its painted surfaces were unstable, with portions of the faded gray-green of the body, the yellow lettering and undercarriage, and the black pinstriping flaking. A surviving bit of roof was found to contain more than 30 years of graffiti, with dates ranging from 1910 to 1944. Early entries may well have been made by Shaw & Powell employees or customers, and may be viewed (depending upon one's perspective) as items of historical interest, rather than vandalism.

Before conservation treatment became a financial possibility, special project funding enabled the park to hire a seasonal museum technician to clean each of the 30 historic vehicles in the museum collection. Thorough cleaning and examination of the Shaw & Powell buggy, which

required use of personal protective equipment as a precaution against Hantavirus, underscored the need to take positive steps toward preserving the vehicle's remaining original fabric.

The park prepared a funding proposal detailing options for treating five different carriages from the museum collection. The proposal included historical information and broad cost estimates, and addressed each vehicle's interpretive potential. Historic photographs of each vehicle (or comparable vehicles) in use and modern snapshots showing current conditions illustrated the proposal. The Shaw & Powell wagon was presented as the park's preferred alternative for treatment. The Yellowstone Park Foundation, a non-profit organization that works with the National Park Service to preserve and protect Yellowstone's resources, accepted the proposal as a 125th anniversary project, and rapidly identified a private donor willing to cover the estimated \$15,000 needed to conserve the Shaw & Powell wagon.

Conservation or Restoration?

With advice and assistance from the NPS Harpers Ferry Center Division of Conservation, Yellowstone museum staff drafted a scope of work detailing treatment needs and documentation requirements. Goals included stabilization of surviving original fabric; preservation of all evidence of historic use; replacement of missing parts with either historically accurate reproductions or parts from the same time period; recovery and documentation of all original elements that could not be left *in situ*; and making the buggy presentable and safe for display. Putting the buggy into running order was never a goal; such consumptive use of a rare and historically significant vehicle was out of the question.

The treatment that was ultimately performed on the wagon is best characterized as a mixture of conservation and restoration. A noted expert on Yellowstone stagecoaches with a resume including treatment of vehicles in private collections and museums including the Buffalo Bill Historical Center in Cody, Wyoming, was selected for the job. Compromises to the original scope of work were made to accommodate some of his preferred techniques and materials, since he was deemed to be the best qualified, overall, to work on the vehicle. Before work began, Yellowstone's museum staff photographed every part of the vehicle, using both black and white and color film.

Shaw & Powell buggy, before conservation, being loaded for transport to conservator's workshop in Cody, Wyoming, 1997. NPS photo.





Shaw & Powell buggy—after conservation—on display in the Old Faithful Inn Lobby, summer, 1998. NPS photo.

The conservation/restoration of the vehicle was performed locally over a period of six months, and entailed stabilization as well as wholesale replacement of missing elements. Described and photodocumented in a final report, treatment included rebuilding most of the top of the wagon and replacing the left side-panels of the driver's box and the driver's footrest. A set of side springs, correct for this vehicle and from the same time period, was located near Helena, Montana and installed on the wagon. The original front springs were re-arched to match the side springs. Original seat parts, found lying on the floor of the wagon, were combined to create one complete seat. The two other passenger seats, all of the leather upholstery, the front leather boot, and the side curtains are historically accurate reproductions of the originals, based on archival photographs and Studebaker catalog illustrations. The seats were stuffed with a rubberized hair product recommended by HFC in place of the excelsior with which the seats appeared to have been originally filled. The iron tires of all four wheels were tightened, but required no other treatment. Pigmented microcrystalline wax may be applied to the wagon's ferrous metal elements at a later date.

The major compromise in the treatment of the wagon involved the use of a 40% linseed oil/60% turpentine mixture as a surface coat on some parts of the vehicle. Because linseed oil tends to cross-link and can leave a dark, sticky film, the scope of work called for the use of a clear microcrystalline wax on painted finishes. However, the conservator had never used micro-

crystalline wax, and was not comfortable working with it. Replacement wood parts were painted with a blend of 50% enamel paint and 50% of the linseed oil/turpentine mixture, applied to achieve an appearance compatible with that of the rest of the vehicle. No inpainting was done, and parts of the buggy that were stable, including the Studebaker Bros. logos in gold leaf that appear on the tailboard, were untouched. Every generation of lettering ever used to identify the buggy as a Shaw & Powell vehicle is still visible.

Minute paint chips were taken from several areas of the vehicle before conservation and sent to HFC. Analysis of these samples may reveal the number of layers of paint on the vehicle, the types of paint used (from which the approximate date of application might be deduced), and the relative length of time each coat served as the surface coat. It may be possible to differentiate paint applied during the wagon's use by Shaw & Powell from paint applied later in an effort to approximate the historic appearance of the vehicle.

Studebaker part numbers were found throughout the vehicle during treatment, and were documented in the wagon's catalog record.

Samples of all original materials removed from the wagon, including fragile fragments of original upholstery and stuffing, were also documented and will be retained in the park's museum collection

Following treatment, the wagon was delivered directly to the Old Faithful Inn, the site selected for its display. Although the inn was historically associated with the dude rather than the tent camper, the site of the former Shaw & Powell camp at Old Faithful is nearby. As the buggy was being installed and photographed, visitors crowded around it and bombarded park staff with questions. An accompanying display on tent camping includes a portion of the original roof, samples of historic tent canvas recovered in the park several years ago, photographs, postcards, and various Shaw & Powell-related artifacts. The buggy remains the only vehicle in the park's collection that is on display. Judging from its popularity, interpretation of the park's early transportation history and preservation of its material culture were long overdue.

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