

# An Archeological Investigation of a Historic Refuse Dump Associated with the Yellowstone Lake Hotel

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## Abstract

In the fall of 2000, while installing a grease trap behind the Yellowstone Lake Hotel, contractors uncovered a historic trash dump overflowing with artifacts, now known as archeological site 48YE825. Cultural resources staff came to the site and collected diagnostic artifacts, such as those with distinct maker's marks, that would be useful in dating the trash pit. These artifacts included glass bottles, china, bricks, and metal objects. During early 2001, the artifacts were cleaned and analyzed in the Yellowstone National Park archeological laboratory. As analysis progressed, it became obvious that the assemblage was indeed associated with the Yellowstone Lake Hotel. It appears that the site dates to the early 20th century, approximately 1915 to 1920. This paper will present some of the more interesting information revealed by artifact analysis, together with some little-known facts about the early years of the hotel.

## Historical Background

The Yellowstone Lake Hotel is the oldest standing hotel in the park, originally built between 1889 and 1891. It has undergone numerous renovations, additions, and subtractions over the years. The first addition was made in 1895, and the first major renovation occurred in 1904–1905 under the direction of Robert Reamer, the renowned park architect. Over the years, he did numerous other renovations on the building. The current hotel looks nothing like the original building, which was quite plain. Much of the following information was abstracted from the Yellowstone Lake Hotel National Register of Historic Places eligibility study, on file at the park.

When Yellowstone National Park was established in 1872, there was only one small hotel in the area, the McCartney Hotel, which was located near Mammoth Hot Springs. Shortly after, two individuals were given leases to build hotels, one along the road to Cooke City, and two along the Firehole River. In 1883, the Northern Pacific Railroad built a line to the northern boundary of the park, just west of current-day Gardiner, Montana. Now that they had access to the park, they wanted visitors to travel their lines and experience “Wonderland,” as the railroad called Yellowstone. The interests of the railroad led to much of the building that occurred within the park in later years.

In the same year that the railroad to the northern boundary was finished, the Department of the Interior leased several plots of land to the Yellowstone National Park Improvement Company, with the intent of having them build hotels for visitors. Money problems held up construction, and by 1886 only one

hotel, that at Mammoth Hot Springs, had been started. The Yellowstone Park Association (YPA), run by Charles Gibson, took over the leases and worked with the Northern Pacific Railroad Company to get money to build the hotels. In 1889, work on the Yellowstone Lake Hotel was begun.

The Yellowstone Lake Hotel was built over the course of two years. Although original blueprints for the hotel were not uncovered during this study, drawings of the floor plans were found. There were numerous complaints about the work being done; one writer claimed that he could kick the foundation out from under the building. There were other problems with shipments of supplies not coming in, or being incomplete, and workers who were drunkards (Dittl and Mallmann 1987). Two similar hotels were being built in the park at the same time: the Canyon Hotel, which opened in 1890, and the Fountain Hotel, which opened in the same year as the Lake Hotel. These buildings all had a similar design, and one foreman was in charge of all of the construction. However, the early version of the Yellowstone Lake Hotel was nothing like the Neocolonial monolith that Reamer eventually molded from it. Someone once described the original, simple building as “a Plain Jane three-story shoebox, with windows” (Mohr 1998).

Once open for business, visitors immediately started coming to the Lake Hotel. The hotels in the park were built to be about a day’s ride from one another, and business was brisk. Various minor renovations were made, and in 1904-1905, Reamer, who had just finished the Old Faithful Inn, started working on the Yellowstone Lake Hotel. He transformed this typical railroad rest stop into a stylish respite in the park’s interior. As with his other buildings, Reamer came back numerous times over the century to renovate and remodel the Lake Hotel. During his first attempt, he extended the roofline in three areas, with Ionic columns supporting it, added false balconies to some of the windows, and decorative moldings elsewhere. A wing was also added to the building at this time, as the hotel was far too small to house all of the people interested in visiting the park. While this was occurring, the original fireplaces were also taken out, as evidenced by floor plans and photographs. During a later renovation, Reamer put in another fireplace in a slightly different location, which is there to this day. Over time, the hotel has become more elaborate and is by far the most elegant hotel in the park today.

#### **Mitigation of Archeological Site 48YE825**

Yellowstone Lake Hotel and several nearby buildings have been listed on the National Register of Historic Places as a historic district. The site number for the historic district is 48YE825, and the trash dump is considered an archeological component of the district. The archeological site was uncovered during the installation of a grease trap behind the hotel. Maintenance staff noticed artifacts in the soil and stopped excavating. Ann Johnson and Lon Johnson, cultural resources staffers for the park, came to the site and collected what artifacts they could. As much of the soil had been pulled out by a backhoe, there was no context for the artifacts, and no stratigraphy was visible at the time of artifact retrieval. The majority of china was found piled together in one section of the site, but the other

materials, such as glass bottles, appeared to be scattered about. Due to the lack of context and limited time, artifacts with distinct maker's marks or datable properties were the focus of collections at the site. Based on the diagnostic artifacts, it appears that the site was used for only a short time, perhaps a single dumping episode, except for two outlying artifacts, which will be discussed later.

Based on the soil consistency and odor, Ann Johnson believes the site to have been a cesspool at some point. For this reason, all artifacts were soaked in bleach water, and gloves and masks were worn throughout the artifact cleaning process. Artifacts were then labeled and catalogued, and are now part of the Yellowstone National Park museum collection.

### **Artifact Analysis**

Over the course of several months, all of the artifacts collected from 48YE825 were analyzed in the Yellowstone National Park archeological laboratory. One of the first questions posed was the origin of the artifacts. Although they were found behind the Yellowstone Lake Hotel, evidence was necessary to determine that the artifacts were in fact associated with the hotel. The first identifiable artifact associated with the hotel was a metal key chain from Room 249 of the hotel itself. Although there is no key attached to it, the artifact was compared with a non-archeological key chain in the park's museum, which dates to the early 1920s. Both are the same shape and style, with slight changes in text presentation. Both items say "Yellowstone Lake Hotel" and "Y.P.A." (Yellowstone Park Association), although the archeological specimen has excessive punctuation ("Yellowstone, Lake. Hotel"), suggesting it is from a slightly earlier period (Susan Kraft, personal communication 2001).

Other artifacts confirmed the pit as being associated with the hotel. The majority of china (22 pieces) found in the midden had the maker's mark of the Greenwood China Company, Trenton, New Jersey. This company specialized in mass-produced hotel wares. The United States Army also used Greenwood china while it resided in the park until 1916, but it appears that the army added an additional mark to its china, such as "Quartermaster's Corps." It is interesting to note that almost all of the pieces of china from the site are virtually whole, with only a few chips on each one.

Other items found among the refuse included pieces of building materials, including some burned wood, a ceramic insulator, two firebricks, and a pressed tile. It was the two bricks and the tile that led to an unnecessary and overextensive study of the early period of the Yellowstone Lake Hotel. Firebrick, as the name implies, is generally used for fireplaces and chimneys. The two firebricks found at 48YE825 were made by the Evens and Howard Company of St. Louis. Many people know of the beautiful fireplace that Robert Reamer added to the Yellowstone Lake Hotel in 1923. It was first thought that the bricks were leftovers from this fireplace, but all of the other diagnostic artifacts suggest a pre-1920 date for the refuse pile. There are no other fireplaces in the hotel, so where did the firebricks come from? The Montana Historical Society's copies of the original floor plans showed that the original building had two chimneys. The first

was associated with the bakeshop; the second was for three fireplaces, one in the first-floor lobby, and two on the second floor, in the parlor and the writing room. In 1904–1905, when Reamer renovated the hotel, he removed the fireplaces, along with the chimneys, as determined by floor plans and photographs. It is probable that the bricks found in the trash pit were from either the bakeshop chimney or one of these early fireplaces. In April 2001, Lon Johnson, the park's historical architect, and I searched the attic of the Lake Hotel looking for possible remnants of the chimneys, but to no avail. We also looked at Reamer's fireplace, and there were no maker's marks visible on the bricks. This is not the case for his fireplace at Old Faithful Inn, ca. 1903, where "Evens & Howard of St. Louis" is visible on every brick within the fireplace (yes, the beautiful stone fireplace at Old Faithful Inn is, in fact, lined with brick). At this point we can surmise that the firebricks found at 48YE825 are likely remnants of one of the original chimneys from the Lake Hotel, unless they are from a later, as of yet unknown fireplace.

The tile found at 48YE825 is also of interest, and also suggests probable evidence for an earlier fireplace. The tile is rectangular and has a plain, very dark green, almost black, appearance, and was made by the American Encaustic Tile Company, of Zanesville, Ohio. Photographs and a description of the tile were sent to several art tile collectors, who concluded that it appears to be the type used as fireplace border tile (Richard Mohr, personal communication 2001). Although tiles could also have been used for decoration in other areas, especially bathrooms, this particular type of tile is likely from a fireplace border. Reamer's fireplace has no tiles like this in association with it. Although the tile could not be dated to a particular year, the range for this tile does go back far enough that the tile could be from the first construction of the hotel. Could this tile then be from one of the three original fireplaces in the hotel? Unfortunately, no photographs or sketches of the original fireplaces have yet been found that can confirm or dismiss this possibility.

As interesting as all of this may be, as an anthropologist, building materials and architecture are not the main focus of my research. The real question I am interested in answering is, "What do the artifacts found tell us about the people who were here?" This question can be answered in part by a discussion of some of the other artifacts. Rather than sort them out by material, I will discuss various themes of use. The material from which an object was made is not as important as what it was used for. We must be cautious, however, in suggesting use, especially with the glass bottles. Until Prohibition ended, glass bottles were often reused and filled with materials other than those they were originally intended for. When discussing bottles, if there is no residue, I will only be talking about the original use of the bottle. It may or may not have been used for this purpose just before it was thrown out.

One of the most interesting themes is that of personal care, meaning hygiene, health, and cosmetic materials. A large quantity of material relating to these topics was found, including a soap dish, four Listerine bottles, several cologne and perfume bottles, a Vaseline jar, bottles for Bromo Caffeine and Bromo Seltzer,

and several facial cream containers, including Richard Hudnut's "Marvelous Cold Cream." Numerous other bottles and containers appear to have been medicine or cosmetic containers, but they are not embossed, and no labels remain to identify their former contents. Both the Vaseline container and one of the Listerine bottles, which was corked, still held their original contents. A reliable date of post-1908 was put on the Vaseline jar, as it had a screw-cap finish, which was not used by its manufacturer until that year (Fike 1987, 186). With the large quantity of cosmetic materials, it is curious to wonder if guests brought all of these items in, or whether staff of the hotel used them. These could be remnants from the women's living quarters that were once in the attic of the hotel. Regardless, it seems that people in the interior of the park, whether visiting or residing there, were very concerned about their appearance and physical well-being.

Two other areas of interest that led to unusual artifact identifications were transportation and recreation. An engine crank was discovered, which may or may not be from a vehicle, along with several other items, which appear to be battery and hood parts. Automobiles were not allowed into Yellowstone National Park until 1915, and the other items, in conjunction with the engine crank, suggest that at least some of them are indeed from a vehicle. Two horseshoes were also found in the trash. Two recreational items of note are fishing rod ferrules. One is of an older style pole that had a solid wood shaft, while the other ferrule was from a pole that had six pieces of bamboo held together with a pin, which is the type of pole still used today. Both still had woody material in them.

The final theme I would like to look at is food and drink. By far, the majority of artifacts were beverage bottles. Several pieces of Greenwood china were found as well, most of them stacked together. These pieces ranged in size from small sauce dishes to dinner platters. Most pieces were whole, though they had a few chips. It is interesting to note that one teacup and one saucer both had burned material in them. Some china fragments not made by Greenwood were also found, though these were much smaller, incomplete pieces.

An unusual food item was the remnants of a chocolate box. Stuffed inside one cylindrical glass container were the remains of a paper chocolate box and its decomposed wrappers. The box was from J. G. McDonald Chocolates, out of Salt Lake City, Utah. The container that held the chocolate box is some sort of condiment container. Several varieties were found at the site, including a ketchup bottle. Two sawn bones of large mammals were also among the food-related artifacts.

Beverage bottles were some of the most numerous artifacts. Several alcohol bottles were found, from large whisky bottles to flasks to plain brown beer bottles. Three of the most unusual bottles were made by EJ Burke and company. These bottles were made with an automatic bottle machine, which dates them to post-1903, and probably a bit later, as large bottles could not be made with automatic bottle machines in the earliest years. The olive green glass has large air bubbles and wrinkles on it, a problem that only occurred during the first years of production on the automatic bottle machine. EJ Burke has a very unusual mak-

ers mark on the base, in the shape of a cat. These bottles were used to bottle either Guinness or Bass Ale (Toulouse 1971).

Another unusual collection was that of grape juice bottles. For some unknown reason, 11 embossed grape juice bottles were thrown in this trash midden, the largest quantity of bottles associated with one beverage type at the site. Each bottle was a small, clear, four-ounce bottle. Again, these proved to be a reliable dating tool. Two bottles were Welch's bottles, while the other nine were for Royal Purple Grape Juice. The trademark for Royal Purple was established in 1916 (registration nos. 75190, 276279, and 392008) by the United Grape Products Sales Corporation of Buffalo, New York. However, no information on the company has been found, and the history of this beverage remains hidden at this time. The form and quality of the bottles also match a post-1916 date.

### Discussion

No conclusive reason for the disposal of the artifacts at site 48YE825 has yet come to light. Included in the collection are a manure pitchfork, pharmaceutical bottles, chipped china, building materials, and a wide variety of other artifacts one would rarely group together. The best explanation developed thus far for their common disposal is that these items represent an end-of-the-season clean out of the Lake Hotel. This would account for the wide variety and large quantity of complete items in the trash midden. The variety of items does not seem to correlate well with either living quarters alone or an area such as the kitchen; there is too much variety. There are probably other plausible explanations for the variety, quantity, and quality of artifacts in the midden, but this seems the most probable.

The two outlying artifacts found in the collection are a Mission Beverages bottle and the base of a vase or flowerpot with the mark of the Yellowstone Park Company. The Mission Beverages Company was not formed until the late 1920s, and the Yellowstone Park Company was not established until 1936. However, the majority of artifacts in the collection strongly suggest an earlier date for the site. After Prohibition ended, it was required that bottles be embossed with the phrase "not for reuse or resale," which is not on any of the bottles in the collection. Surely if the collection was from the late 1930s, the majority of bottles would have this mark. Many of the companies that were identified by maker's marks at this site went out of business during the Great Depression as well. Further, several of the bottles in the collection were not made on automatic bottle machines, and those that were so made showed signs of being from the earliest periods of its use. This combination of bottles suggests a date from the period 1910–1920. Also, the Royal Purple bottles and the automobile parts suggest a date after 1915. As this was a salvage excavation, artifact layers, had there been any, were mixed together by the backhoe. I believe the two anomalous artifacts to be outliers that were located above the trash midden and were mixed into the collection accidentally.

## Conclusion

The Yellowstone Lake Hotel has a long and intriguing history, made more interesting by the use of archeology. Archeological site 48YE825, an early twentieth-century trash dump associated with the hotel, reveals information about part of the area's history that is often overlooked in documents: the everyday activities of visitors and staff in the park. It does not give us more information about presidential visits or unusual bear encounters; rather, the comings and goings of the average people at the Lake Hotel, what they ate, the perfumes they wore, and their passions for grape juice and gargling. Although some people chide historical archeologists about being "garbage-pickers" and "dumpster-divers," the information uncovered in archeological refuse can give new insights into the history of an area. When people throw items out, they do not expect anyone to come along 80 or 8,000 years later to look at them, so these objects are often less biased than historical documents. Thus, items in historic trash piles can tell us a little more about the people who stayed in the park, at places like the Lake Hotel. There are numerous historic sites in Yellowstone National Park; many of them are trash middens that are full of information if carefully studied as collections by archeologists. The next time you are on a backcountry trail, and you see one of these middens, don't look at it as a dirty pile of trash; think about the people who left that trash there and, unknowingly, left us a tangible piece of themselves that can be added to the historical record of Yellowstone National Park.

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