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# You Can Take It with You: Archaeology at the Beaver Creek Trail Crossing

Nolan Johnson

*Abstract: The Beaver Creek Trail Crossing Site was a fording location along the Nebraska City Cut-Off of the Oregon and California Trail, occupied from 1862 through 1871. The site was situated on both creek banks and contained a road ranch, saloon, store, and post office. Geophysical data showed anomalies corresponding to irregularities in the ground surface. While excavation units placed at these locations revealed few remnants of in situ foundations, generalized scatters of mortar, nails, and chinking or filler stones were recorded. Given the lack of timber or stone near the site, this pattern suggests most of building materials were salvaged. This has created unique challenges for site excavation and interpretation. Suggestions for work on salvaged sites will be offered to aid in the study of heavily salvaged sites in frontier and trail settings.*

## *Introduction*

Abandoned farm houses and barns are a regular occurrence on the plains. The ebb and flow of agriculture and rural economics make farming and other businesses in specific locations feasible for only a limited time. When circumstances change, the farm or business moves leaving behind the buildings. Changes in transportation systems can also alter the strategic value of settlements located along transportation routes. For instance, if travelers stop using a route there is no need for businesses to stay. One can simply look at the growth of communities along the nation's interstate highways for an example of how transportation routes drive business growth. The dilapidated buildings, which are left behind as people create new paths, literally fall to pieces. Eventually after years of exposure to the elements, the buildings collapse and all that remains is a scattered pile of debris. This process of location abandonment occurs frequently, but occasionally the buildings are not left to the elements are often salvaged and the materials are taken to be used in new construction.

Salvaging is evident at The Beaver Creek Trail Crossing Site, (25SW49), or Beaver Crossing in Seward County, Nebraska. The site shall be referred to as Beaver Crossing for the duration of the discussion. The original site of Beaver Crossing was approximately four miles northwest of where the present day town still stands. The site is situated on Beaver Creek, which is able to be forded at this location because of the natural entrance to the creek and firm sand and gravel bottom. The site is on the Nebraska City Cut Off, which was part of the California-Oregon Trail System. The Nebraska City Cut Off was originally plowed as a trail for a steam wagon, which was intended to be an alternative to pulling wagons with animals. Though the steam wagon enterprise failed, the plowed track that remained provided an excellent means of traditional wagon travel (Smith 1937: 32). The route was used extensively by freight wagons, and in 1863, John Leonard opened a road ranch, offering hay for passing wagon teams and other amenities for the drivers (Beaver Crossing Committee 1932: 6-7). At its height, Beaver Crossing boasted a post office, general store, and the "Wild West Saloon" (Beaver Crossing Centennial Committee 1975: 3-5).

It is unclear if these businesses were housed in a single building or multiple buildings. In 1871, a grist mill was built on the site of present day Beaver Crossing along the Big Blue River. This location attracted new settlers and the town was moved, name and all, to take advantage of the new prosperity. The grist mill was the only mill of this kind for some distance and allowed the pioneers to have grain ground into usable flour while they waited, and as such was a magnet of activity. About the same time, rail travel began to make wagon freighting obsolete, eliminating most of the travel on the overland trail. The original town site was abandoned after approximately nine years of occupation and the buildings at the original site were salvaged. Everything of value was taken to the new location.

This salvage was motivated in part by the lack of building materials in the area. The only trees in the area would have been along the streams and rivers. More importantly, there were no timber mills nearby to produce lumber. When the new town site was being constructed, in 1871, lumber had to be hauled overland from Nebraska City, a distance of approximately eighty miles (Beaver Crossing Centennial Committee 1975: 3). Adding to the building material shortage, there is no natural stone available at the site. Any stone must have been imported to the location, a costly and time-consuming process as building materials are heavy and bulky. Salvaging was common-place on the trails. People would discard items they could no

longer carry or no longer needed and others would pick them up for their own use (Stewart 1962: 293).

Salvaging activity is identifiable in the archaeological record at Beaver Crossing. Excavations were conducted in the summer of 2005 as part of the University of Nebraska-Lincoln field school. During the course of the excavation, it became apparent that the site had not simply been abandoned, but extensively salvaged as well. The salvaged nature of the site was seen in the artifact distribution as well as the type and number of artifacts found. Different considerations and interpretations are necessary when dealing with this type of site. It is the goal of this paper to demonstrate the evidence of salvage in the material record and to provide suggestions for future work on salvaged sites, including identifying a salvaged site, excavation strategies, and interpretations applicable to similar sites.

Even before the excavation began the site had an unusual quality; there was a complete absence of surface artifacts. This struck the author as strange as all other historic locations surveyed in neighboring states have had abundant surface artifact scatters. Pedestrian survey of the area conducted as a precursor to the excavation did not locate a single artifact on the surface. The site location was surveyed several times with varying spacing, the smallest intervals being one meter. The site did not show signs of extensive erosion or deposition. The location appeared to be slowly aggrading. In other words the artifacts would not have all been buried or washed away. Also, the area has never been plowed or disturbed in any other manner; it has been used as a pasture and for haying since the original Euro-American settlement. Sites that have been subjected to plowing tend to have artifacts churned up from deeper features and deposited on the surface (Hawkins 1998: 96-99). A building or buildings that had been simply abandoned should have left traces visible at surface level, but none were seen. There were, however, two features that were interpreted as cultural. A rectangular mound was interpreted as a collapsed building, and a large depression was thought to be a cellar or well. Neither of these had any remains visible on the surface (DeVore 2005: 15-21).

To compensate for the lack of surface artifacts, geophysical testing was conducted to locate subsurface anomalies to help guide the excavation. The techniques used were, Magnetic Gradient Survey, Conductivity Survey, Resistivity Survey, and Ground Penetrating Radar (DeVore 2005: 5-9). These instruments employ different methods to determine the physical makeup of the subsurface soil and sediments and any disturbances in soil or sediment. The results from these tests were combined with the anomalies seen on the surface to

create a data recovery plan designed to find the remains of a structure. However, the excavation revealed no undisturbed building features. Instead disturbed features and artifacts were interpreted as evidence of salvage activities having taken place.

### *Building Tradition and Technique*

To discuss the salvaging of building materials at Beaver Crossing, it is necessary to speculate what materials were used in the original construction. There are three lines of evidence that shed light on the construction: the popular and predominant building types in the area during the 1860's, historical records of buildings at Beaver Crossing, and the artifact record from the site. Each of these provides complementary information that can be pieced together and used to indicate the construction materials of the original structures and how these were later salvaged during the moving of the town.

A type of structure common during the 1860s on the plains was the sod house. The sod house was built out of necessity as sufficient timber was rarely available on the plains, including eastern Nebraska (McAlester & McAlester 1984: 79-85). Sod houses used timbers for roof supports, posts, and other essential construction features. Also, in areas where stone was abundant, crude masonry homes were built (79-85). Stone could be used as a foundation for different types of wood structures. The foundations of stone would have been set into the ground to provide a stable base for the walls of the building to rest on (Vivian 1976: 24-28). Farther east where timber was more readily available squared log houses were the norm. Bricks were not uncommon on the plains if clays and fuel to fire the bricks could be found locally. Chimneys were often made of wood and lined with clay to prevent the sticks from catching fire (McAlester & McAlester 1984: 83-85). Settlers on the plains had a variety of options depending on the specific resources at their location. Beaver Crossing would have been no exception, and historic records shed further light on construction techniques at the site.

### *Historical Records of Buildings at Beaver Crossing*

Historical records on the early history of Beaver Crossing, Seward County, and Nebraska all mention structures located on both sides of Beaver Creek. The distances of the buildings from the creek are unclear, but all sources describe the buildings in a similar manner. The ranch house on the east side was built by John Leonard in 1863-1864, and a photograph of this home survives, (see Dolan this volume).

It was taken after the structure was purchased by the Reed family in 1866. The house is described as a hewn log structure with a shingled roof (Waterman 1927: 31-33). Leonard is reported to have built other buildings as well (Beaver Crossing Centennial Committee 1975: 2-3). John Fouse settled in the area in 1864 and built ranch house which doubled as the "Wild West Saloon" on the west side of the creek. This structure is described as being built of logs with heavy plank shutters for the windows. The roof was made by placing clay over a framework of wood poles, brush, and hay (Beaver Crossing Committee 1932: 6-7). A description of the foundations for the buildings is not available, but they are described as having cellars.

These descriptions do not fit the typical plains sod house design described by McAlester, but when combined with the specific setting of Beaver Crossing the buildings as described fit the specific circumstance of Beaver Crossing well. There would have been abundant wood along the creek, a fact expressed by the wood construction of the Leonard and Fouse buildings. The roof of the tavern was made of clay set over poles rather than a complete wooden roof, and this type of mixed-roof construction was typical on the plains (McAlester & McAlester 1984: 83-85). The description of Leonard's home indicates that there was enough wood to make shingles, but Leonard would have had to make them himself, as there was no place nearby to purchase or manufacture them (Waterman 1927: 31-33). These two lines of evidence—predominantly building types and written and photographic records—allow for inference about the types and distribution of structural artifacts that would have been at the site.

### *Structural Features and Artifacts*

The artifacts and features discovered at the site show more than just the materials used in the construction of the buildings. They show the patterns of use and destruction that occurred at the site. Two concentrations of mortar and limestone rocks were found. These concentrations were recognized as being related to a structure. They were designated as Feature 4 and Feature 7, respectively, to emphasize their importance as evidence of a building. During the excavation it was assumed that these features would lead to more structural evidence; however, this was not the case. The features are roughly on an east-west line, and excavations between them did not show any further evidence of a wall or foundation trench. Thinking that these features were corners and using the historic documents and the picture of the Reed house to determine structure dimensions, test units were placed to locate the other corners or walls. However, no additional

building related features were discovered. This fact can be interpreted in two ways. First, the walls were never constructed and therefore the archaeologists would not find them. Second, the walls could have been salvaged and the evidence of their construction destroyed. Test units, 2x2 m controlled excavations, were placed between the possible two corners, and any existing archaeological evidence present should have been found. Further excavations at the site will show if any other structural features are indeed located at the site.

The structure of the features is interesting as well. The concentrations of mortar and stone are at depths of approximately 30-50 cm below surface. Both Features 4 and 7 are bordered by scatters of mortar starting at the feature and moving up and to the south. The foundation stones pulled out of the ground and moved to the south during the salvaging of the structure could have created this pattern. If this was the case, the current concentrations of mortar would represent the approximate depth of the original foundation trench. The scatters of mortar would have been at surface level at the time of salvage. The mortar trails, visible in the test unit walls, would have been left as the stones were dragged out of the foundation trench and across the ground. The features are not found in a discernable foundation trench, posthole or other subsurface feature, but are disturbed from their original context. If the structure had not been salvaged the subsurface features should have remained intact, since the site was undisturbed after the abandonment.

The structural artifacts conform to this pattern as well. The stones found at the site were few and far between. The stones that were excavated were all small; the largest associated with Feature 7 (discussed above), was oblong and approximately 12x6 in. There are two questions that surface when considering the stones: why weren't more and larger stones found and what do the ones found tell the archaeologist? The absence of any stone large enough to be used as a foundation stone can be explained in one of two ways: either there was never a stone foundation at the site or the stones had been removed. Both interpretations could be argued by the total lack of available stone in the area and in the archaeological record.

However, the presence of stones and mortar suggests that something of significance was constructed of stone (e.g. the foundation). The stones found were small and often covered in mortar. These small stones could have been chinking stones placed, along with mortar, into the spaces between larger stones or logs. The small stones and mortar were left behind while the larger stones were removed. The small stones were not worth collecting and the mortar was not reusable.

A likely scenario would involve small stones and mortar falling out from in between the larger stones as they were pulled out of the ground.

The other structural artifacts show evidence of salvage as well. Brick fragments were found throughout the site, but no complete or nearly complete bricks were recovered. One hundred fifty brick fragments were found, the largest concentrations were associated with Features 4 and 7. The biggest of these fragments was no larger than a cubic inch. The presence of so many brick fragments indicates that something at the site was made of brick, whether it was a fire place, chimney, or other structure. Some amount of brick was present at the site, but only a few flecks were recovered. A possible scenario is that the bricks were chipped apart from the mortar that held them together and taken during the salvaging. The fragments broken off from the larger complete bricks were left behind as they had no value. Daub was also found at the site (see Dolan this volume).

The three lines of inquiry discussed above paint a picture of salvaging activities at the site, but only when examined together. The building style of the time and the place are important to give a basic idea of how a building at Beaver Crossing might have looked, barring any major deviation from prevailing national and regional trends. This gives a very basic idea of what a building of the time and place would have looked like in general. While this is helpful, the information needs to be combined with the written description of the buildings at Beaver Crossing. This allows the broad building styles to be narrowed down by using the descriptions of the specific structures at the site. Once these two things are compared, a description of building styles of the time and place and descriptions of the buildings at Beaver Crossing, an idea of what materials the buildings were constructed of is reached.

Then, information needs to be compared to the artifacts excavated. The artifacts are the record of what was actually there or left there; not a description or inference of style. At Beaver Crossing the structural artifacts support a pattern consistent with the building trends and historical descriptions, as well as a pattern of small and low value items being left and the larger valuable material being removed from the site (the salvage hypothesis). However, they represent only a portion of the artifacts recovered.

### *Other Artifact Classes*

Glass, metal, and ceramics were also found at the site. Each of these classes of artifacts has the potential to shed further light on the salvaging of the site. The glass can be divided into two groups: pane glass and container glass. Container glass includes drinking glasses,



bottles, vials, and any other vessel designed to hold liquids or solids. Pane glass is window glass or the flat panes used in lanterns, clocks, or other such items. Glass containers would have been valuable, because at this time all bottles required hand finishing and would be obtained from distant sources (Switzer 1974: 1-7). However, no complete bottles were found, while the excavation recovered over 950 container glass sherds. The fragmentary nature of the glass (i.e. no complete or nearly complete vessels) supports the salvage hypothesis. The proposition that whole containers were salvaged requires two assumptions: first, the glass left behind was not radically altered after deposition and, second, complete vessels would have been found if they existed at the site. Also, it is unlikely that the glass bottles were simply left at the site while other materials were salvaged.

The pane glass provides different information. Records of the site indicate that at least the ranch house on the east side of the creek had windows (Beaver Crossing Centennial Committee 1975: 2-3). The excavated pane glass could have come from these windows as over 2000 pane glass sherds were found. The pane glass is difficult to fit into the salvage hypothesis. Panes of glass should have been salvaged before the walls were taken down or the panes would break. The largest sherd of pane glass was found 85-95cm below surface, well below the occupation level. This area was designated Feature 5 due to the large concentration of artifacts and the extensive burned earth, ash, and charcoal. Feature 5 was interpreted, by the archaeologists, as a refuse pit that appears to have been periodically burned. Interestingly, the sherd in question does not show signs of heat alteration. The sherd is from a pane of glass at least four inches square. Its depth and association with Feature 5 places its disposal most likely during the occupation and not the salvaging.

The largest concentration of pane glass sherds in terms of density (mass of glass divided by volume of dirt excavated) was found in test units associated with Features 4 and 7. It is difficult to say whether these concentrations resulted from salvage or not. The panes may simply have been left in the building and broken naturally when the building decayed, or they could have been broken while the walls were being taken apart to salvage the logs. Both scenarios correspond well with the concentrations being located near the only structural features on the site. In either method the glass would probably not move far from the windows when it was broken.

Glass sherds were broken at the site, but it is impossible to tell if the breakage occurred during the occupation, during the salvage activity, or during decay. The pane glass can tell us that some kind of structure that had pane glass windows once stood at the site. This does

support the salvage hypothesis in an indirect way by further confirming the existence of a building to be available for salvaged.

Various types of metal artifacts were recovered, but the most interesting are the nails. Over 900 nails and nail fragments were found. First, this tells us is that something stood on the site that required a lot of nails. This corroborates the written records that say a wooden structure was built as opposed to a sod building. Second, the presence of nails suggests the presence of wood, though, as mentioned above, wood or any record of wood was nearly absent from the excavation. Third, the nails can support the salvage hypothesis. Nails are straight when they are cut. Moreover, when nails are hammered into wood they remain relatively straight and complete. Of the nails excavated only approximately 22%, retain this straight and complete character.

Several different things could account for a high percentage of bent and broken nails. Post-depositional forces acting on the nails could deform them, and indeed nearly all are rusted to some degree, but this is not likely. The nails could have been deformed if the structure was simply left to collapse. If salvaged, the nails could have been bent and broken while the structure was being taken apart and the wood hauled to the new town site. The large percentage of bent and broken nails could represent most of the straight complete nails being collected for future use. This is open to interpretation and more research needs to be done with the nails to explain large percentage of bent and fragmented nails.

There are several other kinds of metal artifacts at Beaver Crossing including bullets, can fragments, an ox shoe, barrel strapping, a fishing hook, etc. None of the metal artifacts are out of the ordinary for a road ranch along the trail in the 1860s. Most of the metal artifacts of this type had either been fully used (e.g. spent bullets), and/or were small enough to be easily lost (e.g. fish hooks). If these artifacts were simply lost, then they do not have any information to offer the salvage hypothesis, but if they were intentionally discarded, they may hold information. The value of the artifacts at the time of salvage needs to be understood; if the artifacts were valuable they should have been salvaged. Further research this artifact type is necessary to fully understand how it plays into the salvage hypothesis.

Ceramics are the third class of artifacts recovered. The ceramic types include clay pipes, whiteware, ironstone, and stoneware. The vessels range from a salt glazed stoneware jug to a blue transfer printed, whiteware tea cup. All sherds found fit with the occupation dates and trail location. For example, 255 ironstone sherds were excavated, which is approximately 20% of the household ceramic sherds. Ironstone was extremely popular from 1840-1870 and

continued to be sold in large numbers until 1900 (Wetherbee 1985: 6). One of the ironstone sherds had a registry mark from 1858.

The presence of ceramics used for tableware and storage of household items provides more evidence that a house structure was located at Beaver Crossing. But what can the ceramics tell us about salvage? We can safely assume that when the town was being moved, the residents of Beaver Crossing would have taken their unbroken ceramic vessels with them. The broken sherds could represent normal use and breakage over the occupation of the site or perhaps they represent the salvage event. The distribution of the ceramics sherds confirm that the occupation was located in the northern portion of the site as all types were concentrated there. The distribution of ceramic sherds should indicate the interior of the building, but further testing at the site is required to make this determination.

### *Conclusions*

At Beaver Crossing, the record shows a site that has been salvaged extensively. This conclusion was reached after examination of all available data and the use of many tools. It is always important to use all available options to understand an archaeological site, but this is more important at a salvage location. At this type of site the artifact record will show only what is left behind and not necessarily all the components that were present during the occupation.

At salvaged sites where the destruction was planned there are certain strategies that can be used to interpret the site. First, because surface artifacts may be limited or missing, especially if the ground has never been plowed, geophysical survey can be used to obtain a picture of underground features, if any exist. Also, a good understanding of the soils of the area is important. Without this intimate knowledge, subtle variation in the soil where a foundation was located could be missed. Historical records need to be thoroughly searched. Again, this is something all archaeologists need to do. When dealing with salvaged sites, it has particular significance because even fewer artifacts may be represented in the archaeological record. At salvaged sites historical records can describe the dwellings that once stood there. Since the site was salvaged, an archaeologist should look for the things that would have been left by the salvagers. At Beaver Crossing, such items included the mortar and small chinking stones that were all that was left of foundation and walls.

A salvaged site offers unique opportunities, but only if it is recognized as such. For example, the artifacts that are not found can be as important as what is found. A salvaged site deviates from the classic

archaeological site because the items left behind were part of a conscious decision, not a random distribution. If something is missing that should be there, then that is possible evidence for salvage. To discover if anything is missing, a salvaged site must be compared with sites similar in age and function. Questions about what was and what was not salvage are important in understanding which items were of economic and social importance to the people who lived at the site. In addition, which items were and were not salvaged can answer questions about the availability of those items, as readily available resource need not be salvaged. The recognition of a salvaged site is important because the artifacts will be different from similar sites that were simply abandoned.

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