Critical Archaeology at 19th Century Western Way Stations: Granite Creek Station, Nevada

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by

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Abstract

Though there is a rich potential for archaeological investigation at 19th century way stations in the American West, projects at stations have primarily stayed within archaeology’s grey literature. Through a survey of archaeological projects conducted at western stations, this thesis uses a critical archaeological lens to challenge perceptions of the physical and social spaces at way stations, while providing an in-depth examination of a recently excavated station in Nevada’s Black Rock Desert. Between 1852 and 1868, Granite Creek Station operated as an emigrant campsite, trading post, stagecoach station, and military camp along the Nobles Trail. Granite Creek exemplifies the ways in which stations combined traditional construction techniques while adapting to local conditions, and is an excellent example of the complicated social environment found at many stations. A critical archaeological examination challenges both historical accounts of a battle at Granite Creek and the general perception of homogeneity at stations.
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Chapter 1: Introduction

Introduction

Popular culture and history enthusiasts have long had a fascination with American westward expansion and the emigrant experience of the mid 19th century. Television shows, movies, popular books, individuals recalling their experiences, and trail museums have constructed a collective perception in the minds of many Americans of what life was like along the Oregon and California Trails and at early towns in the West. Images of a violent, dangerous, lawless, and rugged West permeate much of this perception alongside views of the West as new country, untouched by human hands (West 1995). Archaeology can challenge these assumptions. As recent archaeological projects at early western settlements have shown, this impression of Western emigration and life is often false or at least exaggerated (Dixon 2005, 2006, 2007; Storey 2007). Kelly Dixon’s work at the Boston Saloon in Virginia City, Nevada, for example, showed that the saloon owners made attempts to appear sophisticated by using architecture, décor, and tableware that created a luxurious atmosphere (Dixon 2005, 2006).

Though these studies have countered the image of the mythic West, they focused entirely on settlements and towns. The experience of migration across the West has been primarily left to the purview of historians and trail enthusiasts (e.g., Faragher 1979; Schlissel 1992; Reid 1997; Casper and Long 2001; Bagley 2010; Willoughby 2003; Buck et al. 1994; Leslie Fryman [ASM Affiliates], pers. comm. 2012; Don Buck [Oregon-California Trails Association], pers. comm. 2013). Professional archaeological investigations of emigrant trails and the way stations along them have almost exclusively been studied in a cultural resource management (CRM) context with little in-depth
exploration of life along the trail and at stations, and have failed to challenge the collective perception about trail life portrayed in popular media (Hardesty 1986; Burnett 2013; Dixon 2014; see Burnett 2013 as the exception). These archaeological investigations also remain within archaeology’s so-called grey literature and are not widely disseminated (e.g., Hardesty 1978a, 1989; Myhrer et al. 1990; Hardesty et al. 1994; Buhr 1999; Dixon and Hardesty 2000; Ashmore 2010; Bennett et al. 2014). Published examples have been restricted to popular or well-known sites such as the ill-fated Donner party (e.g., Hawkins and Madsen 1990; Hardesty 1997; Dixon et al. 2011) and the Mountain Meadows Massacre (Novak and Kopp 2003). This focus serves to reproduce some of the myths of violence, danger and adventure in the American West (Dixon 2014). Using critical archaeology, this thesis seeks to synthesize extant material into interpretations that both affirm and challenge perceptions of life along the trails and at stations, while focusing heavily on one particular way station, Granite Creek Station, located in Nevada’s Black Rock Desert. This station was surveyed and excavated in 2013 by the University of Nevada, Reno (UNR). The Granite Creek project exemplifies the ways that archaeology can challenge the assumptions made about conditions at way stations based on the written record.

This introductory chapter is divided into several parts. It discusses reasons why trail and station archaeology has been overlooked, themes that archaeologists have previously pursued at stations, presents an overview of the archaeological project at Granite Creek Station, provides a synopsis of Granite Creek’s written history, and briefly discusses the challenged assumptions pursued in this thesis.
Why Have Emigrant Trails and Way Stations Been Neglected in Research?

There are a number of reasons why there is a lack of archaeological attention to emigrant trails and stations. Management issues, including multiple landowners of trail sections and sites, the reuse and alteration of trails by modern roadways and agricultural activities, reuse of station architectural material for later construction projects, extensive recreational collecting, and the transient nature of trail life are major factors in this lack of work (Myhrer et al. 1990; Buck et al. 1994; Bureau of Land Management [BLM] 2005; Schlereth 1997).

One of the most commonly cited issues in studies of trail remnants is land ownership. Early emigrant trails often cross federal land owned by multiple government agencies (BLM, National Park Service [NPS], United States Forest Service [USFS]) and land owned by states, counties, and private individuals, making it difficult for archaeologists to obtain permits for investigating these remains (Myhrer et al. 1990). In some cases, legal land boundaries also cause management issues when they run through the middle of way stations (Bennett et al. 2014).

Reuse of trail paths and station architectural materials for later homestead structures or roads in marginal environments was also a common practice, leading to a lack of surface trail and architectural remains and disturbance of archaeological deposits in the process (Riemenschneider 1996:151, 1993:15; Peterson 2002; Hart 1965:144). Because many trail paths became well established and encouraged settlement along them, trail and road paths have often been reused, re-routed, paved over, and otherwise altered (Schlereth 1997). In a similar fashion, since station sites were typically located in places with reliable water along significant transportation corridors, farmers and ranchers often
reused them after they were abandoned (Burnett 2013; Bennett et al. 2014). Plowing, animal impact, and other activities associated with ranching and farming are particularly devastating to archaeological sites.

Because of the popular romanticism associated with the period of westward expansion and especially with the image of the covered wagon train, recreational collecting of trail related artifacts goes back to the 1920s and in some cases as far back as the 1870s (Hardesty 1997; Hawkins and Madsen 1990). This hobby continues to be an issue on trails and trail sites today, most often from visitors on public land and private landowners. The knowledge of this collecting has led many archaeologists to believe that early trail sites have been too compromised to contain any archaeological data of value (Leslie Fryman, pers. comm. 2012).

The impermanent or transient nature of trail life, even when undisturbed by collecting, presents problems for archaeological investigation. In the case of trails, the concentration of artifacts is lower along these linear features than more permanent habitation sites, which are typically the focus of archaeological study (Myhrer et al 1990; Buck et al. 1994). The constant flow of people during westward expansion may also make it hard to identify the material remains from any specific ethnic or social community (Purser 1991).

Remains such as caches, however, can provide valuable information on the kinds of things emigrants were willing to leave behind, providing insight into emigrant behavior as well as information on socioeconomic status, ethnicity, gender, age, social values, and other information. Way stations and campsites represent even more permanent features since they were specific places reoccupied by many travelers, and
they have the potential to answer a broad array of research questions about emigrant lifeways, consumption, transportation, identity, and more. Many of the way stations (stagecoach stops, trading posts, stores) still exist on the landscape as standing buildings or at least partially standing structures (Hardesty 1986). The transient nature of the trails is also in part what makes them so archaeologically interesting; many historians describe wagon trains as “surrogate societies” or “fully equipped American communities” on wheels, and certainly many emigrants express this sentiment themselves in their writings (Faragher 1979:27-30).

Archaeological Investigations of Trails and Stations

Despite the previously discussed concerns over management issues and site integrity, archaeologists have still conducted projects at way stations and along emigrant trails. Emigrant trails, caches, burials, campsites, and stagecoach, telegraph and pony express stations have been archaeologically recorded and examined in Kansas, Nebraska, Wyoming, Colorado, Utah, Nevada, Arizona, Texas, New Mexico, and California (Hardesty et al. 1994; Dixon and Hardesty 2000). Though stagecoach, pony express, telegraph stations, and trading posts had slightly different purposes, they also served some of the same general functions such as ferrying information including messages and mail, resupplying travelers and riders, and acting as local gathering and meeting places (Hardesty 1978a, 1989; Berge 1980; Hardesty et al. 1994; Peterson 2002). Individual stations also typically served many purposes at the same time, such as being a stagecoach and pony express station (Berge 1980), a stagecoach station and trading post (Bennett et al. 2014), or a telegraph and stagecoach station (Hardesty 1978a).
Many of the research questions archaeologists have posed during projects at these stations are also similar. Common themes include identifying or confirming trail and station locations and dating the site(s), identifying a signature stagecoach station assemblage, examining station architecture and land use, emigrant diet, mortuary practices, placing the trails and stations in the context of westward expansion and transportation networks, investigating trail and travel behavior, looking at social context and cultural interactions at way stations, questioning the documentary record’s accounts of events, and a limited focus on identifying the presence of women and determining emigrant and traveler socioeconomic status. These research themes have had varying degrees of attention and success (see Bennett et al. 2014 for a full discussion).

**The Archaeological Project at Granite Creek Station**

Granite Creek (sometimes called Granite Springs) Station was utilized as an emigrant camp, trading post, stagecoach station, farm or ranch, and military camp along the Nobles Trail between 1852 and 1868 (Amesbury 1967; Hart 1965:144; Jones 1980:10,103,105; Goodwin 1965:39; Brock and Black 2008:9; Wheeler 1978). Though there has been little research on prehistoric American Indian use of the Granite Creek area, because it was one of few water sources in the harsh environment of the Black Rock Desert it was very likely used by Northern Paiute peoples and other prehistoric populations long before the trail was established. The earliest written historical record for Granite Creek discusses Euro-American settlement, indicating that a significant Euro-American presence in the vicinity of Granite Creek began in 1852 (Driebelbis 1853).
At the time of this project, Granite Creek Station is an historic archaeological site (26-WA-2327) consisting of numerous surface features including earthworks, depressions, stone foundations, and partially standing buildings. The site is located in the Great Basin region of the United States in Washoe County, Nevada in Section 26, T33N, R23E of the 7.5' 1990 USGS Gerlach Quadrangle (Figure 1.1). 26-WA-2327 is located on the edge of an alluvial fan adjacent to the Black Rock Desert playa, approximately 3 miles north of Gerlach, Nevada and 265 meters south of Nevada State Highway 34. The site datum is a tall wooden gatepost on the western edge of the site. 26-WA-2327 comprises approximately 47,900 square meters, and is divided into two separate areas: an area of older features associated with the mid-19th century Granite Creek Station and a later homestead component to the east (Figure 1.2). The later homestead portion is 12,900 square meters and is entirely on private land. The older Station portion is approximately 35,000 square meters, 14,000 of which are on private land.

The remaining 21,000 square meters, which includes most of the features associated with Granite Creek Station and the Nobles Trail, are owned by the United States Bureau of Land Management (BLM), Winnemucca District (Figure 1.3). The private owners to the north of the BLM property boundary, however, extended their fence onto BLM land and the ranch encompasses all components of the site. To protect the remaining stone foundations, the BLM constructed barbed wire fences around several of them. The University of Nevada, Reno (UNR) Anthropology Department conducted Class III survey and limited testing of Granite Creek Station and surrounding trails between June 17 and July 26, 2013 in order to identify the presence, size, scope, state,
Figure 1.1. Map of Granite Creek Station project area.
Figure 1.2. 26-WA-2327 map showing the older and younger site components.
Figure 1.3. Map of property boundary through the original station area.
and affiliation of the remains of the station and surrounding trails. All artifacts recovered were processed in UNR’s historical archaeology lab and are currently curated at UNR.

**A History of Granite Creek Station**

Granite Creek Station was one of several significant stopping places for emigrants, travelers, saddle trains, and stagecoaches passing through the Black Rock Desert region along the Nobles Trail/Fort Kearny-South Pass-Honey Lake Wagon Road. It is significant as a node in the web of travel between the East Coast, gold fields and settlement in California and Oregon Territory, silver mines in Idaho, and all locations in between. As such, Granite Creek must be understood in the context of the road that passed through it.

There are a number of historical sources that discuss Granite Creek and the Nobles Trail, including period newspaper articles, letters, diaries, oral histories, and secondary histories. Some of these histories overlap and contradict one another, making archaeological investigation of the station valuable in verifying or challenging these accounts. Many sources highlight incidents of violence at Granite Creek, giving the impression that Granite Creek fits into the myth of the violent and lawless West. In reality, these incidents were likely remembered and reported because they were shocking, and the majority of travelers probably experienced Granite Creek as an ordinary stop along the trail where they could rest and obtain water and supplies.

*Opening and Development of the Nobles Trail and Granite Creek*
In 1851, William H. Nobles opened the route that would become the Nobles Trail while searching for gold in the Black Rock Desert. This trail was a cutoff from the Lassen-Applegate Trail, a popular but hazardous emigrant road (Goodwin 1965). This new route left the Lassen-Applegate Trail at Black Rock Hot Springs and proceeded southwest across the Black Rock Desert playa to Granite Creek. From there, it continued southwest to Great Boiling Springs (near present-day Gerlach), along the northern edge of the Smoke Creek Desert to Deep Hole Springs, and then through a series of stations and on to California through Nobles Pass, passing just north of Honey Lake and proceeding to Shasta City. From there emigrants could take other roads leading south into California and north into Oregon Territory (Fig. 1.4; DeGroot 1863).

After verifying the route and its advantages, local residents in Shasta raised $2,000 to pay Nobles to divert traffic along his route, encouraging emigration to and through Shasta City; emigrants began traveling the road in 1852 (Jones 1980). In a speech delivered to Congress in 1854, Nobles described the advantages of this cutoff, claiming that unlike the other routes in the area where emigrants could travel up to 50 miles between water sources, on the Nobles Route there were no more than 25 miles between springs or creeks (Robert 1854:7). Nobles characterized the route as “practicable for wagons” because it was flat and straight, shortening the journey. It also helped decrease the loss of items from wagons since the flat plain didn’t require emigrants to abandon goods to lighten the load in order to haul their wagons over rough terrain. Nobles also claimed that “timber and pasturage is abundant” along the route (Robert 1854:7-10). Also in 1854, the cutoff was shortened when hot springs were discovered to the west and south of Rabbithole Springs on the southern edge of the Black Rock playa at
Trego, pulling traffic away from the Applegate-Lassen at Rabbithole and along the southern edge of the Black Rock Desert. From Trego Hot Springs the trail went northwest across the playa to Granite Creek Station and then continued along the rest of the original route to Shasta City (Fig. 1.5; Jones 1980:10,103,105; Amesbury 1968:4-5; Goodwin 1965:39; Brock and Black 2008:9; Wheeler 1978).

Figure 1.4. 1863 map showing both cutoffs of the Nobles route (highlighted in red) through Granite Creek and into California near Honey Lake (DeGroot 1863)
As California’s significance as a resource became more apparent through the 1850s, Congress and the Federal Government began to recognize the need for improved transportation between the east and the west, seeking to improve road networks. The Nobles Trail was one of many roads that benefitted from this initiative. Partially based on the advantages Nobles cited in his 1854 speech, Congress granted a sum of $300,000 for improving the trail and in 1857 sent Superintendent John Kirk, an engineer from California, to survey the Nobles and Applegate Routes to identify areas that should be improved (Jones 1980:10; Brock and Black 2008:9). Kirk noted that the Nobles Trail was very good for wagon travel but found that the water sources along the way were inadequate to support the high volume of emigrant traffic traveling the Nobles Route. Kirk noted that Granite Creek was a “small and insignificant stream where the water is warm and insipid,” which his cattle refused to drink as well as refusing to eat “the coarse grass which covers 3 or 4 acres of the flat mouth of the stream” (Brock and Black 2008:10,34). After Kirk left his position as superintendent in 1859, Frederick W. Lander replaced him and by 1860 began work on the Nobles Route, widening and developing the road and improving several springs by digging them out and paving them. At Granite Creek, Lander’s work party improved the springs by “paving the bottoms and sides” and constructing “several small tanks made with inclined planes for the cattle to descend upon” (Black and Brock 2008:34). Lander’s party also widened and improved the road itself around Granite Creek. Once improved, the route became known as the Fort Kearny-South Pass-Honey Lake Wagon Road, also called the Humboldt Wagon Road (Jones 1980:10; Brock and Black 2008:10; Amesbury 1967).
In 1853, John A. Dreibelbis, Shasta City resident, former Shasta sheriff, and Indian Agent, wrote a waybill for the Nobles Trail that described the route and its stopping places (Brock and Black 2008:15; Dreibelbis 1853). Published in the *Shasta Courier*, this waybill was intended to advertise the route and increase traffic along it. Dreibelbis described the journey from Black Rock (the place of the original 1852 cutoff) to Granite Creek as follows:

*Granite Creek.*—Course south of south west; road excellent, over a perfect desert, as smooth as a planed floor, and nearly as hard, and not a vestige of vegetation on it for 22 miles. This stream comes out of a notch in the mountain range on the right hand, pretty well at the end, leave desert by turning into this gap ½ mile for camp; bunch grass on foot hills. [Dreibelbis 1853; original punctuation and spelling retained]

It was not uncommon for emigrants to travel this part of the trail from Black Rock or Trego Hot Springs to Granite Creek at night to escape the heat of the day on the open playa (Amesbury 1967:16). John S. Wilson, travelling in 1859, wrote the following: “Aug. 18. we started last night abot 10 o’c and crossed the desert and camped 2 miles beyond Granite Creek by 3 o’c in the morning where we found some little grass and here we stayed until 10 o’c” (Wilson 1859). Though the quality and quantity of the grass and water encountered at Granite Creek varied between emigrant accounts, it was the first relief emigrants saw on the west side of the playa.
Early Emigration: Granite Creek as a Resting Place and Trading Post

While occupied, Granite Creek functioned initially as a resting place or campsite for emigrants as early as 1852. Many emigrants echoed Supt. Kirk’s assessment of the conditions at Granite Creek. For example, J.D. Randall, passing through Granite Creek in 1852, noted

Aug. 15. you will reach granite Creek so called in a breach of the mountains in an Elbow not much creek. But you will find grass near the road & water perhaps 2 ms. to the right in this creek. Salt Water in holes near the road. If you stop here go to the good water. The ground in the flat is strongly impregnated with salt

[Randall 1852; original punctuation and spelling retained]

George Grove Davis, passing through Granite Creek in 1860, described the area as having “some very bad water, no grass, but plenty of dead cattle and horses. Awful gloomy” (Davis 1860). Emigrants also report climbing up into the rocky canyon to access better water and grass for their cattle (Favour 1859; McPherson 1937). Other emigrants portrayed Granite Creek in a more positive manner: “Sept. 15. …no crick. Some wells-good water & Some good feed up the canion no wood here Some few greasewood a trading post too” (Favour 1859; original punctuation and spelling retained). The conditions at Granite Creek appeared to fluctuate, as did the flow of the creek, probably relating to the volume of emigrants passing through and the time of year.

As early as 1859 emigrants mention a trading post established at Granite Creek, the owner of which was selling overpriced goods according to Ruth Eliza Warner Taylor,
who noted in 1860 that on Sept. 3 she “came twelve miles to Granite creek and camped (they have the longest miles here that I have ever seen). Bought some butter here for 50 cents a pound, but cannot see that it tastes any better than the 10 cents per pound” (Taylor 1861). Multiple conflicting accounts name different individuals as first developing this trading post at Granite Creek (Table 1.1). Cyrenius Mulkey claimed in 1910 that he was the first to develop Granite Creek as a station and a ranch or haying operation sometime
around 1863 (Mulkey 1910; Lockley 1914). Other sources list Lucius Arcularius and Andrew Litch as co-owners of Granite Creek in 1864-65, when Mulkey claimed to still own the station (Mulkey 1910; Fairfield 1916: 368-370; Brock and Black 2008:161).

Mulkey, who already had a station at Deep Hole Springs to the west, describes finding the meadow at Granite Creek and deciding to build another station there: “In the center of the meadow we dug a pit 14 feet square and 8 feet deep. We banked the dirt around the pit’s mouth for additional protection, and in one corner we sunk a well and struck water” (Lockley 1914). Mulkey describes this as a defensive pit, since other station owners in the area had had violent encounters with local Paiutes. He also mentions a house on the property, though he doesn’t describe its construction. His discussion of his construction methods at Deep Hole Station, however, closely match the architecture of Granite Creek mentioned in other historical sources (e.g., Forbes 1865).

After initial fears and misunderstandings involving what he describes as a “renegade bunch” of local American Indians comprised of “part Paiutes, Pit Rivers, Klamaths, and Modocs,” Mulkey notes the peaceful relationship they developed (Mulkey 1910:98).

Mulkey preferred to continue managing his trading post (which he claims had 11 rooms) and ranch at Deep Hole Springs to the west, and left five men in charge of Granite Creek so they could continue haying at Granite Creek to sell feed to emigrants and travelers for their animals (Mulkey 1910; Lockley 1914). Mulkey owned the stations at Granite Creek and Deep Hole until around 1866 before selling the stations, after which he says that local American Indians killed the new station owners (Lockley 1914:8). Since Mulkey wrote his memoirs in 1910 and was interviewed in 1914 about events that
Table 1.1. Granite Creek’s occupation history based on the documentary record.

<table>
<thead>
<tr>
<th>Granite Creek’s Function</th>
<th>Dates</th>
<th>Station Owner(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resting Place/Emigrant Camp</td>
<td>ca. 1851—1868</td>
<td>N/A</td>
</tr>
<tr>
<td>Trading Post</td>
<td>ca. 1859—1863</td>
<td>Unknown</td>
</tr>
<tr>
<td></td>
<td>ca. 1863—1864 (?)</td>
<td>Cyrenius Mulkey</td>
</tr>
<tr>
<td></td>
<td>ca. 1864—1865</td>
<td>Lucius Arcarius and Andrew Litch</td>
</tr>
<tr>
<td>Stagecoach Station</td>
<td>ca. 1865—1867</td>
<td>Unknown</td>
</tr>
<tr>
<td>Farm/Ranch</td>
<td>ca. 1859—1863</td>
<td>Unknown</td>
</tr>
<tr>
<td></td>
<td>ca. 1863—1864 (?)</td>
<td>Cyrenius Mulkey</td>
</tr>
<tr>
<td></td>
<td>ca. 1864—1865</td>
<td>Lucius Arcarius and Andrew Litch</td>
</tr>
<tr>
<td></td>
<td>ca. 1865—?</td>
<td>Unknown</td>
</tr>
<tr>
<td>Military Post</td>
<td>ca. 1865—1868</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

happened in the 1860s, it’s entirely possible that he misjudged the amount of time he
owned the station and that he actually sold the station in 1864, at which point Lucius
Arcarius and Andrew Litch bought it. This interpretation would give credence to both
accounts. Regardless of who actually owned and developed Granite Creek, it is clear that
it became a significant stopping place for emigrants and travelers.

*Granite Creek as a Stagecoach Station and Farm*

In addition to being a resting place and trading post, Granite Creek was also used
as a stagecoach station, post office, and a farm or ranch. Each of these uses supported the
other; for example, Granite Creek’s use as a farm or ranch helped support the stage line
by supplying coaches and feeding horses. Its use as a post office also financially
supported the stage line through Granite Creek that used portions of the Nobles Trail.
In 1862 an Idaho mining boom broke out in the Owyhee Range and interest grew in making further improvements to the Nobles route. A stagecoach line was proposed that would run along the Nobles Trail/Humboldt-Honey Lake Wagon Road from Chico and Susanville in California and through Granite Creek. From there it would turn north and pass through Soldier Meadows and Camp McGarry in Nevada and then on to Ruby City and Silver City in Idaho (Fig. 1.6; Jones 1980: 10; McIntosh 1962: 16). After further improvements to the road by work parties (possibly including Chinese workers) employed by various stage companies in 1865, the route was confirmed and stocked with supplies, and in early spring Pierce & Francis began running saddle-trains along this route, carrying passengers and mail (McIntosh 1962:19; Forbes 1865:2; Amesbury 1967:29).

In July of this same year, the Idaho and California Stage Company began running stages along this road (Fig. 1.7). Unfortunately for the company, the newspapers greatly exaggerated the dangers of Indian attacks along the route, which discouraged many people from riding the line (Amesbury 1967:30). It is also unclear how successful these stage trips were, since the stage company had trouble improving the road north of Granite Creek and accounts differ on whether stages actually made it to their destinations (McIntosh 1962:15). For example, the Owyhee Avalanche reported on September 9, 1865, that an Idaho and California stage left Chico on schedule with five passengers, but on October 28 the paper claimed that this stage and others never arrived in Ruby City (McIntosh 1962:15).

Despite these fears, the mounting number of mines opening both in the Black Rock and the Owyhee Mines in southern Idaho drew numerous travelers and by 1866 the
Idaho and California Stage Company and the Wells, Fargo & Company’s Express were running stages several times per week (Figure 1.8). Fare for travelling in a saddle train ranged from $50 to $66, while by stage it cost $60 (Fig. 1.9). At its most efficient, a trip of 427 miles from Chico to Ruby City took three to four days (McIntosh 1962:13; Amesbury 1967:30-31).

Granite Creek itself functioned as a stagecoach station for this line in the mid-1860s. It also functioned as a post office (Frickstad and Thrall 1958:38). It was not uncommon for stage stations to function as ranches as well, and this appears to have been the case at Granite Creek (Fig. 1.10; Jackson 1982). Owner Cy Mulkey describes haying at Granite Creek, and the fact that emigrants purchased butter points to the presence of cattle (Taylor 1861). Other sources mention farm implements and blacksmithing equipment present at Granite Creek, all indicating the station was a working farm or ranch (Forbes 1865; Lockley 1914:8; Fairfield 1916:371).

“The Butchery at Granite Creek Station”

During the mid-1860s Granite Creek, as well as some of the surrounding stations at Deep Hole and Wall Springs, reportedly experienced several episodes of violence. The most well-known story was reported in the *Humboldt Register* on April 15, 1865 on events that had occurred on April 1. This story was titled “The Butchery at Granite Creek Station” (Amesbury 1967:17; Fairfield 1916:369). “The Butchery” reported the murder of several station keepers at Granite Creek by American Indians, likely Paiutes. Several secondary historical sources help place this incident in context (Fairfield 1916:368; Brock and Black 2008:161). According to these sources, Andrew Litch and Lucius
Figure 1.6. Stage route from Chico, CA through Granite Creek (marked in red) and on to Ruby and Silver Cities, ID (McIntosh 1962:12).

Figure 1.7. Photograph in Amesbury (1967) labeled “Stage Coach to Silver City,” likely one that passed through Granite Creek Station (Amesbury 1967:31).
Figure 1.8. Silver City, ID, ca. 1870s, where the stage and freight line through Granite Creek terminated (Michno 2007:192; Idaho Historical Society)

Figure 1.9. Advertisement for the stage line that ran through Granite Creek Station, published in the Owyhee Avalanche in Idaho on Sept. 16, 1865 (McIntosh 1962:13).
Arcularius owned Granite Creek Station from 1864-65. From all accounts, Lucius was well liked by everyone in the area, his only fault being “that he was too kind to the Indians” (Fairfield 1916:368). He traded with them frequently and hired them to work for him. He also reportedly loaned them guns and ammunition for hunting rabbits (Fairfield 1916:368). Cy Mulkey’s account of his ownership of Granite Creek, though at odds with these other sources, corroborates the accounts that the owners of Granite Creek Station and the local Paiutes had a mutual friendship (Mulkey 1910; Lockley 1914).

According to the Register, around the 1st of March in 1865, Lucius Arcularius set out west on horseback for Susanville, CA but never arrived. A party was sent from Susanville to look for him and they were able to follow his tracks from Granite Creek to Deep Hole, and then from Deep Hole to Wall Springs. After leaving Wall Springs, his tracks disappeared and after searching for several hours they located his body—he had been shot twice, his horse, clothes, and other goods stolen (Fairfield 1916:368; Brock and Black 2008:161). According to Fairfield (1916:368), it appeared that two Indians had
waited in ambush, shot him, and then stolen his goods. Though there did not appear to be any direct evidence that local Paiutes perpetrated the murder, many settlers in the area interpreted the story in this way.

This event seems to have been a catalyst for further violence that occurred at Granite Creek. After Arcularius’ murder, Andrew Litch (Arcularius’ business partner) placed Granite Creek Station in the charge of three men: A.J. Curry, Cyrus Creele and Al. Simmons, providing them with five guns and “good supply of ammunition” (Fairfield 1916:369). Toward the middle of March a local Paiute who visited the station often and was friends with Lucius Arcularius came to Granite Creek asking where Lucius was and when he would be back. As it happened, a local “unsavory figure” named “Puck” Waldron (or Walden in some sources) was resting his stock at Granite Creek and overheard this conversation between the Paiute and the station keepers (Brock and Black 2008:161). Assuming the Paiute knew of the murder and was mocking them, “Puck” drew his revolver with no warning, told the Paiute “to look into it,” and killed him instantly (Forbes 1865). The three station keepers tried to hide the murder by immediately burying the body, but other Paiutes nearby witnessed their actions (Fairfield 1916:39; Michno 2007:82-84; Brock and Black 2008:161).

These events led to an incident reported extensively in the Humboldt Register. According to the paper, on April 1 “a large column of smoke was seen rising from the vicinity” of Granite Creek, prompting locals to investigate (Fairfield 1916:369). The party found that the station had been burned and the station keepers violently killed, presumably by Paiutes in revenge for “Puck” Waldron’s murder of a Paiute. The paper describes the battle as follows, with additional information in parentheses provided by
Lafayette Marks (as presented in Fairfield 1916) who claims to have been at the scene shortly after the incident took place:

The walls of the house occupied by the men were built from thick pieces of sod. They had made ten loopholes for their rifles on the side attacked. The attack was made from a stone corral about thirty paces off, in front of the house. (To the east and lower than the house.) The whole front of the corral is bespattered with lead of the bullets fired from the house. By appearances the fight is supposed to have lasted about half a day. Curry was killed by a shot through a loophole—a body in the house having been recognized by persons acquainted with him. The legs from below the knees were missing.

The Indians must have exhausted their ammunition, for they fired long missiles before leaving, made from the screw ends of wagon bolts, cut about an inch long and partially smoothed. Two of these were found—one in a bellows near the house, and the other planted two inches deep in wood. Near the lodging place of the latter was a blood stain, and it is supposed the missile had killed a dog belonging on the place—a savage animal, intolerant of Indians. His skin was tanned, but left on the ground.

The Indians gained possession of a storehouse adjoining the dwelling by tearing out a wall. (The station house was on a little flat above the desert and faced toward the east. It was built of sod and had a shake roof. Ten or twelve feet back,
or west, of it was a stone building, perhaps ten feet long and six feet wide, which was used for a storeroom. The Indians dug through the back wall of this building.) This enabled them to reach and fire the roof (of the larger building), and then it is supposed that Creele and Simmons resorted to flight, taking that desperate chance in preference to burning. (They took their guns but didn’t carry them very far.) Creele struck out across the flat towards Hot Springs. The flat is all alkali, very wet, and the tracks are left plain. Three Indians, two on horseback and one on a mule, pursued him and captured him; brought him back to the house, and all the conditions attest that he was burned to death. A portion of the skull, a jaw-bone, and some small pieces of bone were found; the other portions of the body having been reduced to ashes. At the point where the arms would be, were large rocks piled up, everything indicated that he had been thus weighted down; and then a large pile of sawed lumber was built up over this—stubs of the sawed lumber near these marks were found—and the poor fellow thus burned up.

Simmons took the road to Deep Hole station. He ran about thirty or forty rods, and there the mark of a pool of blood denotes that he fared not quite so badly—having been shot down. The body was dragged off a short distance and much mutilated. The remains of all the men, such as were found, were buried by this party on the ninth [Fairfield 1916:369-370]

Though the paper reports that the battle lasted half a day, according to a few individuals who visited the scene shortly after the conflict the battle appeared to have
lasted several days, and both sides ran out of ammunition. One account also says that when the Paiutes got to the storeroom they picked up an old mattress sitting outside, set it on fire, and put it against the roof of the house to ignite it (Fairfield 1916:371). The *Register* continued on to describe the physical conditions of Granite Creek Station after the attack:

The place with all its property, had been worth not less than $400. (Probably $4,000 was meant.) All was burned. A large wagon was destroyed, the spokes being sawed out of the wheels. A large lot of good lumber was piled up on the haystacks and fired. The stove was broken up, and the bottoms of the pots broken in. Nothing escaped but a keg of syrup which had been overlooked. A reaper, haypress, and other tools were demolished. [Fairfield 1916:371]

Though locals and the *Register* attributed this incident to simple revenge for the death of the Paiute killed by “Puck” Waldron, this incident can also be explained when placed in larger regional context. Granite Creek was only one of numerous station attacks in the 1860s across southern and eastern Oregon, eastern Idaho, northeastern California, and northwest Nevada that were part of the Snake Conflict (1864-68) (Michno 2007). 1865 was a particularly violent year for northwestern Nevada and the attack at Granite Creek may have been more of a response to the Mud Lake Massacre that had occurred around the same time as this conflict just north of Granite Creek rather than a simple act of revenge. Even before the Snake Conflict, Euro-American settlers and American Indians alike were still feeling the effect of the Northern Paiute or Pyramid Lake Indian
Wars of 1860-61 (Wheeler 1971:70-70; Fairfield 1916:368-370; Brock and Black 2008:160-161; c.f. Gualtieri 2006:305-310). The incident at Granite Creek, which some people began calling a “massacre” or “torture,” may also reflect specific ways the Paiutes attempted to combat growing Euro-American settlement in the region (Harolds 1951:105). The treatment of the three men’s bodies, the skinned dog, and the absolute destruction of the station itself may reflect Northern Paiute methods for combating witchcraft. Creele’s death by burning especially is specific to the way that Northern Paiutes killed witches, a theme explored in detail by Gualtieri (2006) (Gualtieri 2006:311-14).

**Military Occupation of Granite Creek: Establishing Camp McKee**

As a direct result of the so-called “massacre,” the United States Army moved their camp from Smoke Creek Fort up to Granite Creek sometime in 1865, establishing Camp McKee (also known as Fort Granite) (Rathbun 2002:96-97). Their presence was intended to protect Euro-American settlers, travelers and emigrants from the local Paiutes. They reportedly built the fort “with what the country had to offer,” in this case stones (Amesbury 1967:21). Other records indicate that the Camp had little permanent architecture. The soldiers were housed in tents that “are no longer fit for use being in a worn out and torn condition” (Hart 1965:144). The only structure of substantial construction was reportedly the cookhouse which was made of borrowed lumber, though the owner of the lumber wanted it back later to use it for fencing (Hart 1965:144). Camp McKee was occupied intermittently by the Army during this period as detachments were
rotated through Camp McKee from Fort McGarry to the north (Fig. 1.11; Brock and Black 2008:161).

**Continued Violence at Granite Creek**

Violence continued to plague Granite Creek in subsequent years. In June of this same year (1865), records indicate that a murder and consequent execution took place at the station. According to this story, a work party employed by the Idaho stage line was making improvements to the road near Granite Creek. One of the men in the party, William Rogan, was sent to a man by the name of Charles Barnhart for some rope. Barnhart refused to give it to him, and when Rogan tried to take the rope Barnhart shot him dead. Approximately 30 citizens and 10 soldiers were present at the time and they formed a court, tried Barnhart, and sentenced him to death. They improvised a gallows from wagon tongues at Granite Creek Station and hung him. He and his victim were then buried in the same grave (Amesbury 1967:20).

Yet another story of murder is reported from Granite Creek. In July of 1867, a corporal stationed at Camp McKee (Granite Creek) sent the following report to Camp McGarry:

July 24, 1867, 2½ o’clock pm. Sweeny of the 9th Infantry was killed by Jackson about 10 minutes ago. Bates was with him. Sweeney was in the act of raising his gun at the time Jackson fired. Mr. Elliot was present. I have Jackson and Bates under arrest. What shall I do with the Body and prisoners? The weather is very warm. [Hart 1965:144; original punctuation and spelling retained]
Though it is unclear who these men were, in this same year Granite Creek functioned as a post office for the stage line running through it and a man by the name of George Jackson is listed as the postmaster (Frickstad and Thrall 1958:38). It is possible this was the same Jackson, though this is not conclusively known.
The Stagecoach Line Fails: The Decline of Granite Creek Station

For any stagecoach company in the west, the viability and financial practicality of their line depended on obtaining and keeping a contract to carry mail. The Idaho and California Stage Company had such a contract from 1866-1867 (McIntosh 1962:18-19; Frickstad and Thrall 1958:38). When the contract expired in 1867, the Central Pacific Railroad had already completed its track almost to the big bend of the Humboldt River, rendering the stage line more costly and less efficient than rail travel. Because the railroad could transport mail faster and cheaper than the stage line, the Federal Government decided not to renew the company’s contract and the line passing through Granite Creek was cancelled (Amesbury 1967:31). As traffic dwindled along the road the need to protect travellers lessened and Camp McKee was abandoned by the Army around 1868 (Carlson 1974:161; Mordy and McCaughey 1968:185; Brock and Black 2008:34; Hart 1965:144).

According to all available records, Granite Creek Station appears to have been abandoned thereafter until the beginning of the 20th century. It is likely that the roads through and around Granite Creek, as well as the springs, continued to be utilized for travel and by local settlers since pieces of the Nobles trail are still used today—Highway 34 comprises portions of this route. Although Granite Creek was no longer an official station, locals remembered its location and occupied areas nearby. A 1908 survey plat map shows “Old Granite Ck. Station” adjacent to the “Road from Reno to Idaho” (Figure 1.12). The same map shows a developed area just north of the Station up Granite Creek’s canyon labeled as “Razor’s House” and “Granite Cove.” This likely refers to James
Raser, the superintendent of the Gerlach Live Stock Company that operated several ranches from the late-19th century onward, including one at Deep Hole. Though it is not clear when Raser started living at Granite Cove (upstream from Granite Creek Station), he was hired as superintendent of the company in 1890 and resigned in 1901, though he returned to work for the company again by 1908 (Reno Evening Gazette 1901:1; Nevada State Journal 1908:8). It is unknown how much Raser used the land south of his house around the original Granite Creek Station. Sometime between 1908 and 1911 a man by the name of Norton C. Bowen started homesteading in the vicinity of the station site (Plat Map 1908). He legally applied for a land patent in 1916 for much of the area comprising and surrounding Granite Creek Station (BLM 2013). The canyon through which Granite...
Creek flows from its source bears his name today. The area surrounding the station continued to be used for farming and ranching and as of 2014 was still used for ranching.

**Research Directions at Granite Creek: Challenging the Documentary Record through Critical Archaeology**

Though there are a number of research directions that could be pursued at Granite Creek, one particular theme is taken up in the pages that follow. In this thesis, I focus on challenging the assumptions made about the physical and social conditions at Granite Creek. The physical and social conditions at stations are commonly investigated within archaeology’s grey literature, and thus Granite Creek can be compared to other way stations in the West and generalizations can be drawn about these particular parts of life at these stations (Hardesty 1978a, 1989; Myhrer et al. 1990; Hardesty et al. 1994; Buhr 1999; Dixon and Hardesty 2000; Ashmore 2010).

Based on archaeological investigations at Granite Creek and other stations in the American West, this thesis uses critical archaeology to argue that way station architecture and land use was a mixture of conservative techniques and values carried from the east while also adapting to and using local resources. Despite the assumptions of homogeneity, built environments at stations were also local centers of interaction between a wide variety of individuals including first generation European immigrants, American emigrants with diverse backgrounds, and American Indian and Native Hispanic peoples. The violent interactions at stations between these peoples recorded in the historical record were often exaggerated or fabricated.
This thesis is organized into four chapters. Chapter 1 has provided an overview of station archaeology, a description of the project at Granite Creek Station, a synopsis of the written history for Granite Creek, and the research theme pursued in this thesis at Granite Creek. Chapter 2 presents historical background on emigrant trails and migrant demographics, a brief history of the stagecoach industry, the American Indian experience of emigration in the Great Basin region, and provides a brief overview of critical archaeology. Fieldwork methods and results at Granite Creek are presented in Chapter 3, with a heavy focus on a select number of building remains relevant to this thesis and on the subsurface testing results. Chapter 4 presents the conclusions and interpretations of the fieldwork results at Granite Creek, exposes patterns of physical space and social conditions at western way stations, and places Granite Creek in context with these other stations.
Chapter 2: A Brief History of Emigration, The Stagecoach Industry, and American Indian Conflict in the Great Basin Region of the American West

In order to examine the assumptions about physical and social space at stations, it is necessary to place Granite Creek Station and other way stations in the west in the broader context of westward expansion. Emigrants’ motivations, demographics, and experiences are crucial to understanding interactions at stations. Knowledge of the stagecoach industry is also a necessary framework for comprehending the creation and use of the built environment at stations and the pressures that stage companies were under to transport people and goods quickly. American Indians were a significant presence at stations and their experiences of emigration must be addressed in order to understand their interactions with stations. Finally, an understanding of critical archaeology’s goals is necessary to comprehend the importance of critically examining the historical and archaeological records. This chapter focuses on these themes in the American Great Basin region where Granite Creek is located.

Euro-American Expansion into the Great Basin Region

Euro-American exploration of the Great Basin region of the United States occurred later than other parts of the American West due to its rough terrain and arid conditions. In the late 18th century Spanish explorers began investigating the region for possible establishment of trade routes between New Mexico and California, but abandoned the idea when they determined it was not a practicable enterprise. In the early 19th century, parties of fur trappers in search of beaver began exploring the Basin,
eventually reaching the Humboldt River near modern Winnemucca, Nevada in 1828. John C. Frémont’s expedition of the region between 1843 and 1844 provided the federal government with valuable information about possible military and supply routes that encouraged further exploration of the area by government surveyors and private citizens, leading to the development of the overland routes (Smith 1983:78-81). Though emigrant parties had been moving west through the early 1840s in significant numbers, the news of gold discoveries in California in 1848 caused an explosion of emigration; in 1849 alone, 22,000 emigrants took to the trails and headed west (Willoughby 2003:3-4; Zanjani 2006:1).

The main route through the Great Basin was collectively known as the California Trail, though there were many cutoffs that eventually opened along the way, each advertised as being easier and faster than others (Figure 2.1). Once travelers reached the big bend of the Humboldt River in present-day Nevada they had multiple options for crossing the Sierra Nevada Mountains into California (Fletcher 1980:168). One of the most infamous trails was the Lassen-Applegate cutoff, opened by brothers Jesse and Lindsay Applegate in 1846 and later touted by Danish blacksmith Peter Lassen. Lassen highlighted the route’s supposed advantages over others and acted as an inept guide for emigrant parties, often causing them more harm than good by leading them on unnecessary and extended detours (Amesbury 1967:1, 3; Curan 1982:103; Goodwin 1965:38). As a consequence, the route became known as the Lassen Death Route, though thousands of emigrants and travelers used it during the rush to the California gold fields in 1849 for lack of a more direct route in the area (Amesbury 1967:4).
Motivations for Moving West

American westward expansion was not a single expanding wave of emigrants who moved west and stayed there, as is often depicted in popular media and history. Though people did move west, it was a much more complicated process than is often portrayed; some settled permanently, while others moved around the west following

Figure 2.1. Map of the Oregon and California Trails and cutoffs (Lavender 1980:90).
mining booms, and still others did not find what they were seeking and returned east. Quite often individuals made more than one trip between the east and west (West 1995; Michno 2007:59). Certain years and times of the year were more popular for travel, with many emigrants choosing to travel (in either direction) in spring and summer (Faragher 1979; Jones 1980; Willoughby 2003). According to historical records, motivation for emigrating to California and Oregon territories varied, though there were some consistent themes. One was economic, since a Depression swept the country starting in 1837, encouraging many people to emigrate west towards the promise of cheap and productive land (Schlissel 1992:19). Starting in 1849 with the California Gold Rush, mining wealth also became a significant draw (Schlissel 1992:71-72; Willoughby 2003). Many emigrants also moved for health reasons, believing they were fleeing cholera in the east, especially in eastern cities (Schlissel 1992:59; Valenčius 2002).

**Emigrant Demographics: Age, Occupation, Economic Status, and Ethnicity**

Some historical sources indicate a relative homogeneity in emigrant demographics while others claim there was more diversity. Many sources indicate that most migrants were poor or middle class farmers, many from Missouri, Illinois and Iowa (Faragher 1979; McBride 2002; Carson 2004). Based on emigrant diaries and census data collected at forts along the routes, Faragher (1979:189) determined that six out of ten emigrant families had a male head-of-household with the occupation of farmer. Other common occupations included carpenter, blacksmith, teacher, doctor, and preacher (Faragher 1979:16). Most men made the move at the same point in their lives: most were in their twenties, had been married only a few years, and 80% had already made a major
move within their lifetime (e.g., from the East Coast to Mississippi) (Faragher 1979:18). Adults in general (men and women) were between the ages of 16 and 35 (Schlissel 1992:28). Most women who made the journey were married, though there are a few accounts of single women making the trip. In the early years of emigration in the 1830s and 1840s most emigrants traveled in family groups or larger wagon trains (Figure 2.2; Hardesty 1994:132; Schlissel 1992:28). Most families took more than one wagon since they were not able to fit all the necessary items into one, and families were often multi-generational (Faragher 1979:23,33). After the mining boom and subsequent increase in station stops, trading posts, and better knowledge of travel routes in the late 1840s and into the 1850s-60s, numerous single men made the trip west as well, often in the employ of other families as a wagon driver or teamster, or simply by themselves or in a small company of other single men (Faragher 1979:25, 35-36; Willoughby 2003).

Other sources indicate more diverse backgrounds with emigrants representing various cultures, ethnic groups, religious denominations, educational backgrounds, and economic interests (NPS 2010; Carson 2004; Schlissel 1992). There are accounts of African American men and women travelling in wagon trains, either as slaves with their masters or as free individuals (Schlissel 1992:5). There are also many accounts of intermarriage and trading interactions between emigrants and American Indians (Tate 2006; Mackey 1994; Faragher 1979; Schlissel 1992). Other ethnic groups of interest on the trails include Chinese, individuals of indigenous Mexican or Hispanic heritage, and Italian, Irish, English, and German, since first generation European immigrants were a significant demographic recorded in the Great Basin region during the 1850s (Hardesty 1986; Carson 2004; Faragher 1979, Schlissel 1992). Many of these individuals tend to be
underrepresented in firsthand accounts, likely because they were unable to read and write and historians must rely on secondhand accounts when those individuals took the time to mention some of the diversity (Schlissel 1992; Willoughby 2003).

Figure 2.2. Emigrant wagon train, date unknown (West 1995:50-51; Colorado Historical Society, Denver).

The Stagecoach Industry in the West

Though stagecoaches were used on the East Coast by the early 18th century, they did not develop into a significant mode of transportation in the American West until the 1850s. Stagecoaches designed for use on the East Coast were not suited for the rough
roads and harsh conditions of the west. They were also not financially practicable without government sponsorship in the form of mail contracts (Burnett 2013:13-14,18-19). In order to generate enough profit to be worthwhile, companies had to contract with the Federal Government to transport mail since passenger fares were not high enough to cover operating costs. By the 1850s stagecoach technology had evolved, roads in the west improved, and there was enough demand for quick transportation of people, goods, and mail to render stage lines viable means of transportation. Concord coaches, for example, were lighter enclosed coaches with a flexible design to carry passengers, goods, and mail (Moody 1967:11).

Many firsthand accounts of stagecoach journeys describe unpleasant, dangerous, and uncomfortable trips. Stagecoach companies competed aggressively for mail contracts, since they were critical for a line’s financial viability. Speed was a major deciding factor in whether or not the government would renew mail contracts. Because of this need for fast transportation, companies focused more on quick delivery than the comfort of their passengers, often riding through the night and only briefly stopping to change horses in order to stay on schedule (Hardesty et al. 1994:28-31).

Stagecoach Stations

Stagecoaches were maintained and supplied by stations along their routes. There were three general types of stations based on the services they provided: terminal stations, home stations, and swing stations. Terminal stations were the largest and most diverse stations located at the beginning and end of stagecoach routes. They were often located in towns and included offices, supply depots and elaborate lodging for travelers
Home stations were typically smaller than terminal stations and were located at the beginning and end of drivers’ routes or shifts. They typically had a few facilities for loading, eating, making repairs, and staying overnight. These stations were usually about 50 miles apart (Hardesty et al. 1994:29-30).

Swing stations were the most numerous kind of station. These stations were temporary stopping places with facilities primarily for changing teams and making repairs. Sometimes they had small facilities for eating or staying overnight, but not on a large scale. Most often they were just a building or two for housing staff and a corral or stables to house horses and mules. These stations were typically 10-12 miles apart—the distance a horse could continuously travel at speed before needing to rest (Hardesty 1994:30-31).

Stagecoach companies built their own stations and contracted with existing homesteaders, farmers, and ranchers along their routes to serve as swing and home stations (Jackson 1982; Hardesty et al. 1994:31-32; Burnett 2013). The chosen method of station establishment depended on the company that ran the route. Stagecoach companies tended to construct swing stations (rather than contract with existing properties) specifically for their own purposes since they needed them every 10 to 12 miles. This means swing stations were more likely to have consistent construction plans (Hardesty et al. 1994:31-32).

The Stagecoach Industry Declines

Most stagecoach lines declined in the 1870s with the completion of the transcontinental railroad, though some lines in more remote parts of the West continued
well into the 1890s and even into the early 20th century (Hardesty et al. 1994; Burnett 2013:16). The development and widespread production of the automobile beginning with Ford’s Model T ultimately rendered stagecoach travel unprofitable, and after the early 20th century most stagecoach lines were cancelled (Burnett 2013:16).

**The American Indian Experience of Emigration: Conflict**

Though fears of encounters with American Indians frequently plagued emigrants and travelers before and during their travel, the early years of emigration were generally free of conflict. Early settlers reported little trouble in their journals and diaries, and often described mutually beneficial relationships of trade (Hardesty 1978b:4; Tate 2006). The explosion of migration to California’s gold fields in 1849 changed this dynamic. In resource scarce areas, the volume of emigrants heavily taxed the environment. These migrants overused and dirtied water sources, consumed resources such as grass and game beyond the carrying capacity of immediate environments, and used resources indigenous peoples used for food, such as piñon, for fuel instead (Hardesty 1978b:4). Emigrants themselves often noted this overuse of resources though little was done to remedy the effects. Firsthand accounts are full of descriptions of water sources polluted by dead livestock and overgrazed grass along major routes (Brock and Black 2008). Emigrants also did not understand indigenous worldviews and frequently trespassed on and degraded sacred spaces (Gualtieri 2006; Tate 2006).

By the early 1850s, emigrants and travelers were reporting violent conflicts with American Indians in some areas of the Great Basin with such frequency that the federal government took interest and sent local Indian Agents to investigate (Hardesty 1978b:4).
Though these agents reported that the conflicts were largely due to the volume of emigrants and their behavior, they encouraged the government to establish military posts along the major routes to protect emigrants. Despite this request, no posts were established in Nevada until 1860 (Hardesty 1978b:4-6). Other areas of the Great Basin did not experience intense conflict until the late 1850s due to their isolation, including the Black Rock Desert region in northwest Nevada (Smith 1996:43). It is unclear exactly which American Indian groups were part of this ongoing conflict in the general Nevada region, but likely included bands of Northern Paiute, Shoshone, Bannock, Gosiute, Klamath, Modoc, and Washoe due to ongoing resource depletion and conflict forcing groups out of their traditional territories (Hardesty 1978b:4; Smith 1996:46; Michno 2007:ix, 9, 129).

In 1859 relations between emigrants, settlers, and American Indians in Nevada escalated when the Comstock Lode, and other silver discoveries, occurred and miners and settlers poured in to the region (Hardesty 1978b:5; Michno 2007:14). Within two days of a gold and silver discovery in southern Idaho’s Owyhee Mountains, for example, 2,000 men left the Boise area for the Owyhee district to develop Ruby and Silver Cities (Michno 2007:14). The continuous depletion of resources by emigrants and settlers through the 1850s and a brutal winter in 1858-1859 meant local Indians were starving, and raids and attacks involving violence increased exponentially. Primary sources at the time also indicate that American Indians believed the severe winter was a consequence of Euro-American emigrants and settlers degrading the natural environment and angering the spirits. All of these factors contributed to the escalating violence in 1859 through the 1860s (Hardesty 1978b:5-6).
One incident in particular is credited with triggering the Pyramid Lake War (also called the Northern Paiute War) of 1860. The generally accepted version of the story is that the owners of Williams Station along the Carson River kidnapped several Paiute women and held them as captives. In retaliation, a small band of Paiutes attacked the station, killed two of the three owners, and burned it to the ground (Hardesty 1978b:7). Other versions of the story claim that the attack was perpetrated by local white settlers and made to seem like an attack by Paiutes. Regardless, the incident became called a “massacre” and triggered retaliation by volunteer detachments from Virginia City, Silver City, Genoa, and Carson City who rode to Pyramid Lake to “avenge wrongs” (Hardesty 1978b:9). Unbeknownst to them Paiutes had been meeting and organizing for several months near Pyramid Lake to address the rising problems caused by increasing Euro-American travel and settlement. Close to three quarters of the volunteers were killed, causing a panic and increasing the number, size and violence of skirmishes through 1861 (Hardesty 1978b:43). As a consequence of this war and the continued violence in the region, the U.S. War Department ordered the construction of Fort Churchill along the Carson River in August of 1860 (Hardesty 1978b:16).

Though the Pyramid Lake War is said to have ended in 1861, conflict continued through the 1860s. When the Paiute War ended, many of the defeated Indians who lived near Pyramid Lake and the Carson and Truckee Rivers fled north to avoid the trails and roads near the Humboldt River (e.g., Carson and Truckee routes; Figure 2.3). Many ended up in Nevada’s Black Rock and Smoke Creek Deserts while some pushed up into Idaho and Oregon. Increasing pressure from these groups moving north led to even more fighting with tribes in Oregon and Idaho in addition to fights with Euro-Americans.
Between 1864 and 1868 tensions increased and developed into what is known as the Snake Conflict or the Snake War (Michno 2007). Though this conflict is not well known, it was the deadliest Indian war during westward expansion as measured by the loss of human life (Michno 2007:ix).

Conflicts during this period generally consisted of small attacks involving a handful of deaths at way stations, ranches, small farming communities, and American Indian camps rather than any large, lengthy battles. Despite how the process of westward expansion is often portrayed, it was not a clear divide between Euro-Americans on one side and all American Indians on the other (Michno 2007:37-45, 51). This conflict was characterized by a high degree of ethnic hatred, with soldiers and volunteers ordered to “‘destroy every male Indian whom you may encounter’” (Michno 2007:16). American Indian tribes in the region also often had longstanding loyalties and disputes with one another and such animosities were intensified as groups were pushed out of their traditional territories and became more desperate for resources. In the region of the Snake Conflict, many bands of Northern Paiute had long been in conflict with Oregon groups such as the Modoc and Warm Springs. The Warm Springs Indians often joined forces with the U.S. Army to fight their old enemies to the south (Michno 2007:25).

Due to the increasing violence during this period, the federal government ordered the establishment of military camps and forts along major transportation corridors to protect emigrants and settlers (Michno 2007:63-65). Because the Civil War drew U.S. soldiers away from the Great Basin region, volunteers who were often inexperienced, racially intolerant, angry at perceived wrongs done by American Indians, and out for
blood replaced many of the trained and experienced soldiers at these posts (Tate 2006:225-228). Though soldiers were sent back west at the close of the Civil War, volunteers continued to be a significant presence at military camps. Further forts and camps in addition to Fort Churchill were constructed starting in 1862 with Fort Ruby in east-central Nevada (Michno 2007:79).

Additional camps were established near mining districts and at way stations, though their presence did not reduce the number of skirmishes or casualties (Michno 2007:79). By 1865 well-liked Indian Agent Warren Wasson representing the Pyramid Lake area left his position and succeeding agents were more interested in making money than helping local tribes, making the spring of 1865 one of the most violent in Nevada.
during the Snake Conflict (Michno 2007:80). Heavy casualties continued on all sides through 1867, though the number of deaths dropped off in 1868. By July of 1868, so many tribes had been devastated by hunger and the loss of life that accompanied the ongoing conflict that they were willing to make treaties, and though conflicts continued in neighboring regions, the violence in the Northern Great Basin diminished (Michno 2007:328-330).

Though this particular conflict surrounded the northern Great Basin, fear of so-called “Indian depredations” were common along most trails and at most way stations in the American West throughout the period of emigration and settlement (Tate 2006; Michno 2007). Attacks were commonly described in detail at stations throughout the West (e.g., Berge 1968; Riemenschneider 1993, 1996; Smith 1996; Michno 2007). Though reports typically focused on these violent interactions, peaceful and routine connections and exchanges also occurred between American Indians, migrants, and station keepers at way stations (e.g., Fairfield 1916; Burnett 2013).

**Critical Archaeology**

Critical archaeology developed out of cultural anthropology’s critical theory, which was an attempt to adapt Marx’s ideas to the 20th century. Critical theory draws attention to the point of view from which conclusions are drawn or assumptions made, and by doing so tests their validity (Leone et al. 1987; Potter 1992). It exposes the preconceptions and motivations present in interpretations. Critical archaeology applies this to archaeology. Critical archaeology’s goal is to enlighten or illuminate the assumptions about the past and challenge them using the material record (Potter 1992;
Wilkie and Bartoy 2000). Theoretically, this enlightenment through challenging assumptions can “serve as the basis for emancipatory social action” (Potter 1992:118). The past can therefore have an effect on the present and future. Critical archaeology often manifests itself through collaboration with descendant communities and public interpretation to “display the pierced ideology” that often comes out of a critical examination of the historical and archaeological records (Potter 1992:118).

In this thesis, critical archaeology is applied to assumptions about the physical and social spaces of western way stations. Many written historical sources about western way stations indicate a relatively homogeneous physical and social station environment (Hardesty et al. 1994; Jackson 1982). Critical archaeology can bring attention to these assumptions and challenge them both on a regional level and a local level. For example, a regional review of archaeological grey literature on stations indicates that not all stations were dirty and unattractive places to stay, and station keepers often had peaceful relations with local American Indians (Berge 1968; Mackey 1994; Burnett 2013). On a local level, archaeology at Granite Creek indicated that the physical space at the station mirrored patterns found at other stations while calling attention to and challenging the account of violence between the station keepers and local American Indians. These are discussed further in Chapter 4.

This chapter has explored migrant demographics and motivations, the economic and political forces behind the stagecoach industry, the American Indian experience and resistance to westward expansion, and introduced critical archaeology. These themes are critical to understanding the written record and assumptions at stations. In many ways the Great Basin region typified the built environment and social interactions and conflict that
occurred across the West in the mid-19th century. In others, the physical and political conditions present in this region produced a unique built environment and social relations at stations.
Chapter 3: Fieldwork Methods and Results

This chapter covers the fieldwork methods and results at Granite Creek Station (site 26-WA-2327) during the 2013 field season. Pedestrian survey, remote sensing, and subsurface testing were conducted at Granite Creek, and 15 features associated with the station were located and recorded (see Table 3.1). Because this thesis focuses on the use of space and the multicultural interactions in that space, only the remnants of buildings (Features 1 through 4) and subsurface testing at Granite Creek are discussed in detail in this section. For an in depth description of all features, refer to the full site report for this project (Bennett et al. 2014). The results section is divided into surface features and subsurface testing.

Fieldwork Methods

Fieldwork for this project occurred over 26 days between June 18, 2013 and July 26, 2013 with a five-day workweek. The field crew consisted entirely of University of Nevada, Reno personnel, including Dr. Carolyn White as the principal investigator, Ph.D. student Steven Holm, M.A. student Laura Sechrist, M.A. student Elizabeth Bennett, and M.A. student Ashlee Younie. Fieldwork was separated into three phases: pedestrian survey and remote sensing, feature recording, and subsurface testing.

Survey

Pedestrian Survey

Pedestrian survey was conducted on site between June 18 and 19, and covered the portion of the site owned by the BLM and that owned privately by Jola and Danny Mott.
A 10 meter transect spacing was used for survey, and all artifacts and features observed on the surface were flagged and recorded using a Garmin GPSmap 60CSx (Global Positioning System) GPS unit. No artifacts were collected during the pedestrian survey.

Based on pedestrian survey findings, the site was divided into two loci: the component associated with the original Granite Creek Station and a separate set of features to the east associated with later homesteading of the vicinity (see Figure 1.2). During survey, 15 features associated with Granite Creek Station were observed and assigned sequential feature numbers in order of discovery (Table 3.1; Figure 3.1). Feature 9 was originally identified as an earthen berm but later determined to be a natural dune and was not mapped or recorded. Simple descriptions of features were created and later revised and expanded with more detail. East of the station in the homestead area, six features were identified, assigned feature numbers, and described. West and south of the station component, a portion of intact Nobles Trail was identified and followed until it merged with Highway 34, photographed, and marked with GPS (Figure 3.2).

Remote Sensing: Metal Detector Survey

Remote sensing for this project consisted of metal detecting over 12 days between June 18 and July 25 with two Teknetics Alpha Metal Detectors. Because this project focused primarily on the station and not the later homestead component, metal detecting was only conducted in features and areas surrounding the station. Features within and surrounding the station area were selected for remote sensing in an attempt to determine the purpose of the features and the area of heaviest occupation. Those areas with the most metal detector hits were then targeted for subsurface testing. Features 1, 2, 3, 4, 6, 7, 10,
Table 3.1. Features associated with Granite Creek Station’s occupation.

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Feature Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature 1: Stone Foundation</td>
<td>Granite stone foundation of a rectangular three room structure</td>
</tr>
<tr>
<td>Feature 2: Corral Foundation</td>
<td>Granite stone foundation of a large, rectangular corral</td>
</tr>
<tr>
<td>Feature 3: Stone Structure</td>
<td>Granite stone foundation and partial standing walls of a small one room square building</td>
</tr>
<tr>
<td>Feature 4: Historic Earthworks</td>
<td>Earthen berms arranged in a rough “U” shape, likely a building foundation</td>
</tr>
<tr>
<td>Feature 5: Mounded Earth and Stone</td>
<td>Earthen mound covered with granite stones</td>
</tr>
<tr>
<td>Feature 6: Depression</td>
<td>Shallow depression adjacent to Feature 2</td>
</tr>
<tr>
<td>Feature 7: Ditch and Berm</td>
<td>Ditch and adjacent berm that connects to Feature 8</td>
</tr>
<tr>
<td>Feature 8: Ditch and Berm</td>
<td>Ditch and adjacent berm that connects to Feature 7</td>
</tr>
<tr>
<td>Feature 9: Natural Dune</td>
<td>Natural dune, originally thought to be of anthropogenic origin</td>
</tr>
<tr>
<td>Feature 10: Swale</td>
<td>Swale from a trail path</td>
</tr>
<tr>
<td>Feature 11: Modern Earthwork</td>
<td>Earthen berm with obvious adjacent backhoe scoops</td>
</tr>
<tr>
<td>Feature 12: Modern Earthwork</td>
<td>Earthen berm with obvious adjacent backhoe scoops</td>
</tr>
<tr>
<td>Feature 13: Stone and Mounded Area</td>
<td>Earthen mound with a few scattered granite stones</td>
</tr>
<tr>
<td>Feature 14: Swales</td>
<td>Two parallel shallow swales of a trail path</td>
</tr>
<tr>
<td>Feature 15: Trail and Open Meadow</td>
<td>Open trail path through the vegetation with an open, trampled meadow bisecting the path</td>
</tr>
<tr>
<td>Feature 16: Depression</td>
<td>Small depression adjacent to the gravel road that bisects the site</td>
</tr>
</tbody>
</table>
14, 15, and 16 were metal detected. What was labeled as an Open Passage Area (OPA) and a potential travel corridor on Granite Creek’s original 1975 site form was also metal detected (Figure 3.1). Additional areas of interest that were metal detected included the space between Feature 2 and Feature 7 and the general vicinity surrounding Features 3 and 4.

Metal detecting was chosen as the remote sensing technique for this project to align with the well-established methods of the Oregon-California Trails Association (OCTA) and Trails West, Inc. for locating emigrant trails. Emigrant wagons and stagecoaches often dropped metal parts such as bolts, nails, wire, animal shoes, and other hardware which metal detectors can easily locate (Buck et al. 1994; Helfrich et al. 1984). It was also chosen because of its cost efficiency relative to other remote sensing techniques and to investigate specific historical accounts of Granite Creek. According to historical documents, the station was the site of a battle or massacre, and presumably metal detecting would be useful in locating spent ammunition since it is often used in battlefield archaeology.

In order to prevent frequency interference between metal detectors, one was used at a time to cover one meter transects across the selected features and areas. A flag was placed on each metal detector hit and other crewmembers followed behind, investigating each hit with a pickaxe, handaxe, or shovel as appropriate. Non-diagnostic wire fragments were typically left unmarked and not collected, while diagnostic artifacts were photographed, marked with a GPS point, and collected in labeled plastic field bags.
Figure 3.1. Map of Features 1 through 16 in the station area (Feature 9 omitted).
Figure 3.2. Map of the section of Nobles Trail surveyed during this project.
**Feature Recording**

Once identified, all 21 features were photographed and GPS points taken on them. Features 1 through 16 (not including Feature 9) were mapped using a tape and compass. Elevation profiles were taken for earthen features that were difficult to represent with only a plan map (Features 6, 7, 8, 10, and 16). Because the GPS unit was not capable of recording polygons, GPS points were taken on building remnants (Features 1 through 4) at each corner to be later sketched in ArcGIS.

**Subsurface Testing**

Two 50 cm x 50 cm test units and two 50 cm x 50 cm shovel test pits (STPs) were excavated in the vicinity of the original Granite Creek Station between July 23 and July 26 after the site features were recorded. Units placed inside features were given a designation based on their associated feature; Unit 1 in Feature 3, for example, became F3U1. F3U1 was placed inside the eastern wall of Feature 3 near what was suspected to be a doorway to help identify Feature 3’s age and purpose, and F4U1 was placed inside Feature 4 in the northeast corner near a possible door for the same purpose. STP 1 was located in Feature 14 and was intended to identify the site’s strata. STP 2 was located northeast of Feature 4 and intended to investigate the heavy concentration of metal in this area located by metal detecting.

All corners of each unit and test pit were recorded with GPS. Both units and shovel test pits were excavated using square shovels, trowels, and occasionally handaxe to loosen the soil. All test units were excavated in arbitrary 10 cm levels (unless a significant soil change was encountered) to sterile, and all soil was sifted through a ¼
inch screen. Soil textures, colors, and types were identified and recorded using Munsell books. Level forms, photo logs, GPS logs, and bag logs were produced for all units. All artifacts recovered in the screen or observed in the units and pits were collected and bagged. After excavation, profiles were drawn for one wall of each unit or STP and all excavations lined with sheeting and backfilled.

Fieldwork Results

During the 2013 field season at Granite Creek Station, UNR identified a total of 15 features in the vicinity of the original station. UNR discovered and recorded an additional six features associated with the homesteading component to the east of the station. The 15 features in the area of the station included depressions, water control features, building and corral foundations, and trail segments (Table 3.1). Living floors in Features 3 and 4 were identified during excavation, as was a distinct burned layer directly east of these features. Though 21 total features were identified during this project, only building remnants and subsurface results are presented here since they are most relevant to this thesis. These include Features 1 through 4 and the “throw zone” near Features 3 and 4. For a detailed description of all features, see Bennett et al. 2014.

Surface Features

Feature 1: Stone Foundation

Feature 1 was located approximately three meters south of the gravel road that bisects the site. The feature consisted of a single course of granite boulders and cobbles arranged into three distinct sections. The entire feature, including the outlying granite
stones, was approximately 11 meters by 17 meters, though the footprint of the structure was 12.8 meters by 3.4 meters. The first northernmost section measured 4.7 meters by 3.8 meters; the second section to the south measured 4.4 meters by 3.8 meters; and the third and smaller southernmost section measured 2.9 meters by 2.7 meters (Figure 3.3, 3.4, 3.5). The southwest wall of this third section had a distinct straight granite stone arrangement unlike the rest of the feature, possibly hinting at the original construction technique and form (Figure 3.6). The northernmost section was bisected by the BLM/private property line with the private property to the north and BLM land encompassing the rest of the feature to the south. There was a break in the stones on the eastern side of the second (middle) section, possibly an opening or doorway. A few stones (less than 10) had tufa or possibly mortar affixed to the stones.

Due to the lack of mortar or tufa on a majority of rocks, construction was most likely dry laid rock walls with minimal shaping and mortaring except where necessary. Perhaps local clay or mud that would not have preserved was utilized to fill in the gaps, though it is impossible to conclusively identify this in the feature. Because its construction technique was very similar to other building features on site that were tested, the building most likely dates to the emigrant trail/stagecoach/military time period (1852-1869). Like the site, this feature exists in a fluvial depositional environment. Heavy rains prior to fieldwork deposited organic material from the mountains to the north; it is likely that this has been the case in the past as well. Therefore a part of this feature may be buried under clay and silt.
Figure 3.3. Map of Feature 1.
No artifacts were visible on the surface that could be conclusively associated with the station occupation. One amber beer bottle (modern) was found within the feature on
Figure 3.6. Feature 1’s distinct linear stone arrangement in the third section; facing southeast.
the surface. Metal detecting of the feature and surrounding area indicated a small number of buried artifacts within the feature and a small number within 10 meters on all sides of the feature. There was no discernible concentration or pattern to these sparse metal detector hits (Figure 3.7).

![Feature 1 metal detector hits. Each red dot represents one hit; facing southeast.](image)

Feature 2: Corral Foundation

Feature 2 was located 40 meters southeast of Feature 1 and was a large rectangular stone foundation surrounded by a barbed wire fence (Figures 3.8, 3.9, and 3.10). The foundation was comprised of subangular white and gray granite stones, one to three courses tall above the surface with the tallest concentration along the southeastern wall near the eastern corner. Wall width varied, but was on average approximately one meter. The feature measured 52 meters by 21 meters. There was an opening on the northeastern wall adjacent to the north corner approximately 5.6 meters wide that was most likely an entrance. A few stones in the foundation were partially covered in mortar
or tufa (Figure 3.11). The interior of the structure contained no visible stones on the surface. Towards the northern corner of the interior were the remains of a wagon (Figure 3.12). There was also a ditch in the interior of the structure near the southwest wall that was approximately 1.5 meters wide and 15 meters long. The size and shape of the structure, as well as historical records, indicate that this feature was a corral or enclosure. The method of construction, which is similar to other structure remnants on site that are associated with dateable artifacts, suggests that it was of the emigrant/stagecoach/military era (1852-1869). Feature 6, a depression likely used as a small stock pond, was adjacent to the exterior of Feature 2’s southeastern fence line towards the east corner.

Few artifacts were visible on the surface. There was a piece of ferrous scrap metal just outside the barbed wire fence near the west corner of Feature 2, as well as one between the fence and the stone foundation in the west corner. There was also a larger ferrous metal scrap about one meter long adjacent to the feature’s southeastern wall where Feature 6 articulates with Feature 2, possibly for water control or flow between

Figure 3.8. The east wall of Feature 2 facing southwest; vegetation cleared.
Figure 3.9. Map of Feature 2.
Figure 3.10. The south wall of Feature 2 facing east; vegetation cleared.
Figure 3.11. Rocks within Feature 2 with mortar or tufa.

Feature 2 and Feature 6. The wagon inside Feature 2 was made of cut lumber, ferrous fastenings, and other hardware. The nature of the bolts and nails (i.e., machine made) indicate that this wagon was of later origin than the emigrant/stagecoach/military era. Metal detecting of Feature 2 revealed a handful of buried metal objects but no heavy metal concentrations or noticeable patterns (Figure 3.13).

Feature 3: Stone Structure

Feature 3 consisted of a single roughly square room, constructed of multiple dry laid courses of granite and a few other naturally occurring boulders such as limestone (Figures 3.14, 3.15, and 3.16). Sections of wall had clay or mud packed into the gaps between stones more than 50 cm above surface, which may indicate the walls were originally chinked with local clay (Figure 3.17). A few stones also had the previously
mentioned mortar or tufa accretion. The structure was 6.2 long by 5.5 meters wide. It is unknown whether the building is a dwelling, storehouse, or other type of structure. It was the most intact structure dating from the emigrant trail/stagecoach/military time period (1852-1869) on the site, with the tallest portion of wall being on the east portion of the
southeast wall, which was nearly one meter above surface (Figure 3.18). Association for this time period was established based on artifacts recovered from the test unit in Feature 3 and artifacts recovered nearby.

The feature was fenced on all four sides by the BLM. Rock fall surrounded the exterior of the structure with the highest concentration of rock fall along the exterior of the southwest wall. On the northeast side was a four-meter long, one to two course line of granite stones that ended before reaching the southeast wall. This gap likely indicated a door into the structure, or some kind of entrance into Feature 4 (located northeast of Feature 3) due to its proximity. Two earthen mounds completed this wall. The southeast wall was the most intact of the feature with at least three main courses of granite, and in some places there were up to seven standing courses. There was a small absence of stones in the middle of the northwestern wall; although small, it could have been a secondary entrance or window. The stones on this northwest wall showed that care was taken in the

Figure 3.14. Feature 3 facing south; vegetation cleared.
Figure 3.15. Map of Feature 3.
placement of these stones, since the flat faces of the granite boulders faced both interior and exterior to the structure to present flat facades (Figure 3.19). It is unclear whether
these stones were shaped or merely selected for their shape and rotated appropriately.

Some of this alignment was also visible in the southwest wall, suggesting that the entire structure may have presented a relatively flush exterior and interior.

The interior space of the structure was fairly clean and littered with minimal rock fall. The only surface artifacts within the feature were fragments of cast iron near the southeastern wall. Metal detecting within the feature revealed several hits, but with no discernible pattern (Figure 3.20). Metal detecting around the feature revealed an interesting pattern of hits, possibly indicating the “throw zone” or “trash halo” of Features 3 and 4 (Figure 3.21).

Feature 4: Historic Earthworks

Feature 4 was located adjacent to Feature 3’s southeast side and consisted of a
Figure 3.19. The northwest wall of Feature 3 facing northeast, showing an alignment of flat facing stones; vegetation cleared.
Figure 3.20. Feature 3 metal detector hits facing south, each red dot representing one hit; vegetation cleared.

Figure 3.21. Metal detector hits around Features 3 and 4, facing south. Each red dot indicates one metal detector hit. Note that the scatter is heavy only on the northeast side of Feature 3; vegetation cleared.
series of earthen berms arranged in a rough rectangular “U” shape with its long axis
trending northwest-southeast. It was likely the remains of an earthen structure (Figure
3.22, 3.23, and 3.24). All berms were no taller than 50 cm above surface. The feature was
1.6 m wide by 3.5 meters long. There was a small depression adjacent to the feature on
the southeast side and a cattle trail directly southeast of this depression. Whether humans
or cattle formed the depression is not known. A second cattle trail that ran northwest to
southeast crossed the southern corner of the feature.

Figure 3.22. Feature 4 facing southeast; Feature 3 fencing visible in the top right corner.

The northwest side of the feature consisted of a large raised mound and a smaller
raised mound. The larger raised mound was trampled by a cattle trail at its northern end.
A medium-sized mound approximately 4 m to the northeast of Feature 4 was considered
part of this feature due to its similar form and proximity to the main feature.
Surface artifacts associated with the feature included two pieces of vessel glass: one was colorless and the other was an aqua body fragment located in the south corner of the feature. Corncob remains were also present around this feature, which are most likely related to the presence of modern cattle. Metal detecting of the feature revealed a small scattering of artifacts inside and surrounding Feature 4 (Figure 3.25).

Subsurface Testing

Feature 3 Unit 1 (F3U1)

F3U1 was a square 50 cm x 50 cm test unit located just inside the northeast wall of Feature 3, between the two earthen mounds that comprise the wall (Figure 3.26). F3U1 was excavated to a depth of 60 cm below datum through level 5 and five strata were noted in the west wall of the unit. Most artifacts were recovered from Strata II and III,
Figure 3.24. Map of Feature 4.
and included faunal remains (cow radius), nail fragments, unidentifiable ferrous
fragments, charcoal smears and pieces, and a bolt sticking out of the south wall at the
interface of Strata II and III that was later pulled from the unit (Figures 3.27, 3.28, and
3.29). There was one granite stone in the northeast corner of the unit in Levels 2 and 3 (Strata II and III), though it is unclear whether this was part of the original wall or merely rock fall (Figure 3.30). There was also a faint and spotty charcoal layer (Stratum V) uncovered approximately 25 cm below surface bisecting Stratum IV (Figures 3.31 and 3.32).

Figure 3.27. Closing photograph of the south wall of F3U1. Note the bolt protruding from the wall at the interface of Strata II and III.

Figure 3.28. Cow radius found in F3U1.
Figure 3.29. Ferrous bolt found in the south wall of F3U1.

Figure 3.30. F3U1, base of Level 5. Note the granite stone in the northeast corner and the bolt protruding from the south wall.
Figure 3.31. Closing photograph of the west wall of F3U1. Note the faint charcoal layer near the bottom of the wall.

I. 10YR 6/2 light brownish gray silty clay with granite and gypsum inclusions. Organic debris, such as grass, stump fragments, roots, and root staining are present throughout the stratum. A still-rooted stump towards the center of the west wall was removed at the end of Level 1.

II. 10YR 6/2 light brownish gray with granite and gypsum inclusions. There were more abundant fragments of charcoal and metal compared to Stratum I.

III. 10YR 6/2 light brownish gray sandy clay, the sand representing decomposed granite. Organic debris, primarily small roots and some root staining, were still present.

IV. 10YR 6/2 light brownish gray sandy clay, the sand representing decomposed granite. Organic debris, primarily small roots and some root staining, were still present.

V. 10YR 6/2 light brownish gray clay mixed with sand and spotty charcoal.

Figure 3.32. Schematic profile of F3U1.
Feature 4 Unit 1 (F4U1)

F4U1 was a 50 cm x 50 cm unit located in the northern corner of Feature 4 (Figure 3.33, 3.34). This unit was excavated 5 levels to 50 cm below datum and no cultural material was recovered. Four strata were observed in the east wall of the unit (3.35).

Figure 3.33. F4U1 facing southeast; vegetation cleared.

Figure 3.34. F4U1, base of Level 5.
I. 10YR 6/2 light brownish gray silty clay with granite and gypsum inclusions. Some root activity without staining was present.

II. 10YR 6/2 light brownish gray clay with granite and gypsum inclusions. More roots were found while screening compared to Stratum I.

III. 10YR 6/2 light brownish gray clay with granite and gypsum inclusions. More roots were found while screening compared to Stratum I.

IV. 10YR 6/2 light brownish gray clay mixed with sand, the sand representing decomposed granite.

Figure 3.35. Schematic profile of F4U1.

Shovel Test Pit 1 (STP 1)

STP 1 was a 50 cm x 50 cm test pit excavated in Feature 14. Four strata were noted in the unit, and no cultural material was observed or collected (3.36).

Shovel Test Pit 2 (STP 2)

STP 2 was a 50 cm x 50 cm shovel test excavated northeast of Feature 4 in the heavy concentration area surrounding Features 3 and 4 (3.37). This concentration likely
Figure 3.36. Schematic profile of STP 1.

I. 10YR 6/1 gray silty clay.

II. 10YR 5/2 grayish brown silty clay, compact.

III. 10YR 5/2 grayish brown clay loam.

IV. 10YR 6/2 light brownish gray sandy clay.

represents the “throw zone” or “trash halo” surrounding these two features. The unit was placed over a series of metal detector hits between two already dug metal detector investigation holes and excavated to a depth of 50 cm below surface. Since these metal detector tests and subsequent investigations began turning up glass and metal artifacts in addition to a burned charcoal layer, STP 2 was placed near Feature 4 to better examine
the stratigraphy and determine whether there were distinct and intact occupation layers present outside these features. Five strata were observed in STP 2, many of which correlated with the strata in Feature 3 Unit 1. A relatively thick charcoal layer not present in F3U1 was observed in STP 2 beginning at 7 cmbs (Figures 3.38 and 3.39). Olive, aqua, and colorless vessel glass, cut nail fragments, a large strip of iron, bone, a piece of a comb, and unidentifiable metal fragments were recovered from STP 2, all between 3 and 30 cmbs (Strata II-V). Most artifacts were recovered between 3 and 20 cmbs (Strata I through IV), the majority coming out of Strata II, just above the charcoal layer, and the charcoal layer itself (Strata III). Though there were a few artifacts recovered after 20 cmbs, it is likely these fell from higher levels while excavating or arrived in lower levels through bioturbation, cryoturbation, and argilliturbation.

![Figure 3.37. Location of STP 2 (on the left) in relation to Feature 4 and F4U1 (during excavation) facing southwest. Note the two metal detector tests near STP 2, one in front and one behind.](image)
“Throw Zone” Northeast of Features 3 and 4

Metal detecting around Features 3 and 4 revealed a heavy concentration of metal on the northeast sides of these features that resembled a “throw zone” or “trash halo,” as is expected around 19th century inhabited structures. This area was investigated using the metal detecting methodology described in the previous chapter and a number of artifacts were collected. These included a melted bullet and melted piece of lead, a bullet casing, an obsidian lithic (Figure 3.40), cupric pipe fragments, cast iron fragments (some possibly part of a cast iron stove) (Figure 3.41), animal shoes, slag, a bolt, wire fragments, nail fragments, and a Spencer rifle casing (Figure 3.40).

The results of this project indicate that Granite Creek Station consisted of four buildings with numerous trail paths passing through the station. There were also
construction projects aimed at maintaining cattle and other domestic animals such as stock ponds (Feature 6). The interpretations of these buildings, the use of space, and the interactions in these spaces at Granite Creek are discussed in detail in the next chapter.

Figure 3.39. Schematic profile of STP 2.

I. 10YR 6/2 light brownish gray silty clay. Organic debris, such as grass and sticks, was present.

II. 10YR 6/2 light brownish gray clay mixed with sand.

III. Charcoal layer.

IV. Mottled 10YR 6/2 light brownish gray and 10YR 6/3 pale brown sand, possibly decomposing granite. Roots were present throughout the layer.

V. 10YR 6/3 pale brown clay mixed with some sand.
Figure 3.40. Artifact photograph of an obsidian lithic and a .56 Spencer rifle casing.

Figure 3.41. Two cast iron pieces, most likely part of a stove.
Chapter 4: Critical Archaeology of Physical and Social Spaces at Western Way Stations

The physical space and social interactions in that space have been explored in trail and way station archaeology. By comparing these aspects of archaeologically investigated stations, general patterns of these aspects of station life can be compared, contrasted and generalized. Granite Creek Station can then be compared to these patterns. A review of the archaeological literature indicates that stations were typically built from local materials, and many demonstrated north-south building alignments that may represent a traditional construction technique carried from the eastern United States. Critical archaeology reveals that social interactions were both peaceful and violent and involved many different cultural groups including Euro-American emigrants, European and Chinese immigrants, native Hispanic populations, and American Indians. Granite Creek follows some of these patterns at stations, while displaying its own variations due to its unique environmental and historical conditions.

This chapter presents the patterns in physical and social spaces observed through a review of archaeological projects at western way stations. It then presents the results of the project at Granite Creek Station while placing this station’s physical and social spaces in context with the patterns at other stations using a critical archaeological lens to illuminate the differences between the written and archaeological record for Granite Creek. Finally, conclusions about the broader significance of these patterns and suggestions for future research are discussed.

The Built Environment and Use of Space at Stations
Architectural Materials

A review of station archaeology reveals that way stations were constructed from various kinds of stone, adobe bricks or plaster, sod, wood, and any combination of these materials (Buhr 1999; Berge 1968; Hardesty 1978a, 1989; Dixon and Hardesty 2000; Mackey 1994; Hardesty et al. 1994; Riemenschneider 1993, 1996; Burnett 2013). In general stations were assembled from materials available locally. Stations built of wood, for example, are more common in Colorado, California, Kansas, and parts of Wyoming and Nevada where wood was more plentiful (Hardesty et al. 1994:17-21). Stations made primarily of wood also often had wooden floors and roofs, though roofs were also sometimes made of clay and thatch (Buhr 1999; Dixon and Hardesty 2000). Examples of wooden station buildings include Davis Station in California and Jacob’s Well Station in Nevada, which had wooden barns and hotels (Dixon and Hardesty 2000; Buhr 1999).

Adobe was another commonly used material in station architecture. Stations were typically constructed from adobe in Arizona, New Mexico and Texas, where this kind of architectural material was already common and material for making adobe bricks was easily found near stations (Hardesty et al. 1994:17-21). An example of an adobe station is the Gila Bend Stage Station in Arizona, which was constructed of unfired adobe bricks and consisted of several buildings divided into smaller rooms in which travelers could spend the night (Figures 4.1 and 4.2). Archaeological investigations revealed that the rooms to accommodate travelers in this station were plastered and painted or whitewashed, combating the prevailing historical reports from passengers that stations were hastily constructed and unattractive places (Berge 1968:174,238; Dixon and Hardesty 2000; Hardesty et al. 1994).
In Colorado, Nevada, and some parts of California and Texas that were less wooded, station buildings were typically made of local stone (Hardesty et al. 1994:17-21; Riemenschneider 1993, 1996). Stone was used for the walls and sometimes the floors, with wooden or thatch roofs (Hardesty et al. 1994:184). Other stations made of stone had dirt or sand floors (Hardesty et al. 1994; Hardesty 1979). Examples of stations made of stone include Lockwood Station in Colorado made of sandstone slabs, the Rock Creek

Figure 4.1. Aerial view of the Gila Bend Stage Station showing small rooms (Berge 1968:178).

Figure 4.2. Gila Bend Stage Station excavation, 1960s (Berge 1968:176).
Stage and Telegraph Stations in Nevada made of local rhyolitic boulders, and Head of the Concho Stage Station in Texas constructed of local limestone (Figure 4.3; Hardesty et al. 1994; Hardesty 1978a; Riemenschneider 1996:148).

Figure 4.3. Lockwood Stage Station, Colorado, showing stone walls and floor (Hardesty et al. 1994:177).

Sod is another example of local materials being used for construction. From the archaeology conducted at way stations to date, it appears that sod was not a common construction material for stations, though it was used on occasion. There are only a handful of recorded stations made of sod; Nostrum Springs Station in Wyoming is one example (Figure 4.4; Burnett 2013). Nostrum Springs Station has visible remnants of its wooden roof, though sod houses are also known to have been constructed with bundles of thatching and little or no wood (Burnett 2013; Linebaugh 2005; Welsch 1968).

Stations could also be built from materials transported to the site. Sometimes local materials were not available or were inadequate, while other times certain qualities of
these transported materials were advantageous enough to warrant the transportation and purchase costs. For example, redwood from the Pacific Coast was used to construct the supporting beams and floor of the sod Nostrum Springs Station in Wyoming (Figure 4.5; Burnett 2013). Burnett (2013) suggests this is because redwood is particularly resistant to insect infestation, was a harder wood than what was locally available in Wyoming, and lasted longer (Burnett 2013:181). Better transportation routes and lower transportation costs beginning in the late 19th century explain why this station was able to afford this material. Johnson’s Station in Texas used large limestone boulders not natural to the immediate environment of the station as footings for a wooden building (Ashmore 2010:26). Ashmore (2010) suggests that these boulders were brought to the station to construct a more stable building since adequate foundation materials were not present.
The Use of Space at Stations

Though many stage companies contracted with local settlers and farmsteads to use their existing facilities as stops, other companies constructed their own stations. The Butterfield Company, which ran through Oklahoma, Texas, New Mexico, Arizona, and into California, built its stations with a particular set of blueprints (Figure 4.6; Jackson 1982:8-9; Riemenschneider 1993, 1996). This company built their swing and home stations consistently as one building divided into multiple rooms; even the corral and stables were attached as part of the same structure. This building plan has been interpreted as a defensive measure against possible theft and American Indian attack (Hardesty 1978; Hardesty et al. 1994:31-32; Riemenschneider 1993, 1996).

Figure 4.5. Redwood post and flooring, Nostrum Springs Stage Station, WY (Burnett 2013:181).
There are other interesting similarities in the use of space at way stations. Many station buildings consisted of two or three rooms oriented along a roughly north-south axis (Hardesty et al. 1994:1; Hardesty 1978a; Ashmore 2010; Riemenschneider 1996). This is the case at stagecoach stations as well as pony express and telegraph stations (Hardesty 1989, 1978a, 1979). The form and orientation is widespread, and does not represent the architectural preference of a particular stagecoach or telegraph company. The orientation may represent a vernacular Euro-American architectural style that was brought west as transportation and settlement networks expanded across the American West. Other researchers interested in early architecture in the American West have noted this architectural preference. In his review of sod houses constructed in 19th century Nebraska, for example, Roger Welsch (1968) notes that the walls of most sod houses were “aligned with the North Star on a clear night” (34). There have been suggestions by

![Figure 4.6. Typical plans of Butterfield company stations (Riemenschneider 1993:14).](image_url)
scholars that station orientation is related to the direction of prevailing winds in order to maximize heating and cooling efficiency and that stations and houses were adapted to their environment in this way (Ashmore 2010; Jordan et al. 1997).

Many stations functioned as ranches or farmsteads in addition to way stations, producing their own hay, butter, and other goods for the station owners to consume and to sell to locals, emigrants, and travelers (Taylor 1861; Mulkey 1910; Bennett et al. 2014; Dixon and Hardesty 2000). Hardesty et al. (1994) argue that therefore the footprint for station-farms is often much larger and more complicated than the Butterfield single building stations. Stations that were farms contained several outbuildings in addition to a main station house, including barns, storehouses, and large setups for cutting and processing hay such as hay presses and covered structures for storing hay while it dried (see Jordan et al. 1997 for a discussion of haying and associated structures). They also needed fields for grazing cattle, sheep, horses, and mules. Many environments in the West along transportation corridors did not support these activities and were altered to produce more suitable grazing land. Water control was especially critical, and took the form of improving existing springs by digging them out to expand them, ditches to transport water, and berms to control water flow (Mulkey 1910; Fairfield 1916; Burnett 2013; Jackson 1982; Bennett et al. 2014).

Western way stations were made from a variety of materials and varied in form. Most stations were swing stations and consisted of one to two buildings with a handful of rooms each for housing station keepers and stock animals, and for performing necessary operations such as blacksmithing and selling goods to travelers. Sometimes these buildings were constructed along north-south alignments, reflecting traditional
construction techniques carried West with migrants. The built environment at stations, therefore, was a combination of traditional elements and local adaptations. Some stations consisted of single structures containing spaces for all necessary station tasks, while others functioned as farms in addition to stations and had numerous outbuildings and fields for grazing livestock. Many of these stations that produced hay and other agricultural products reported hiring a multicultural work force as farm hands or blacksmiths, often including local American Indians, Native Hispanic peoples, and Chinese laborers (Riemenschneider 1996; Dixon and Hardesty 2000; Burnett 2013; Bennett et al. 2014). The space at stations was therefore a setting for these interactions.

**Social Spaces at Western Way Stations**

Social interactions at way stations were often both peaceful and violent. Because they were often located in remote places and were part of the ever-expanding transportation network in the American West, trails and stations were places of multicultural interaction between indigenous peoples, Euro-Americans, and other first generation immigrants such as Chinese and Swedish individuals (Dixon and Hardesty 2000; Bennett et al. 2014; Burnett 2013). Some researchers have used the concept of borderlands to understand this interaction, seeing the way station as “a place of intercultural communication” because stations were more often than not located in or near territories occupied by contemporary American Indian groups or owned by first generation European immigrants (Burnett 2013:8). This interaction is recorded in historical documents, found in the remaining architecture and stratigraphy of stations, and
in the artifact assemblages recovered (Burnett 2013; Bennett et al. 2014; Berge 1968:177,236; Mackey 1994:18; Hardesty et al. 1994; Tate 2006).

Though the historical record and popular imagery of trails and stations presents a persistently violent multicultural atmosphere, in reality peaceful interactions were very common. Historical documents indicate that American Indian women visited stage stations and that some of them married station keepers (Mackey 1994:18). Burnett (2013) found that Nostrum Springs Stage Station’s owners likely had peaceful relations with local indigenous groups because it was located so close to Wyoming’s Wind River Reservation and the documentary and archaeological records lack reported episodes of violence. The presence of a local petroglyph figure (a Dinwoody figure) carved into the plaster wall of the stage station, presumably by local American Indians who worked at the station, supports this idea according to Burnett (2013:168). At Lockwood Stage Station in Colorado, Hardesty et al. (1994) found lithics present on site in addition to flaked glass, ironstone and iron projectile points, suggesting that American Indians traded and interacted with the station owners (Hardesty et al. 1994:34,135,159-174).

Other accounts do document violence between local American Indians and station occupants. For example, Berge (1968) found that historical documents claimed local Indians had burned the Gila Bend Stage Station in Arizona in 1860. Excavation of the station confirmed that the station had indeed been burned (Berge 1968:177,236). A similar account is found at Head of the Concho and Johnson’s Stations in Texas (Riemenschneider 1996:147; Ashmore 2010) Though the archaeological evidence at these stations cannot confirm or deny that it was American Indians who set these fires,
the presence of burning lends credence to at least part of the story in the historical accounts.

According to some archaeologists, architectural styles can also indicate associations with certain ethnic groups based on traditional methods of construction and in the layout and purpose of specific spaces. Hardesty et al. (1994) found this to be the case at Lockwood Station in Colorado, where the first period of construction and occupation are represented by what they determined to be typically Anglo-American construction of the stage station house. The second phase of construction, which was an addition made to this original building, was more similar to traditional Hispanic construction techniques (e.g., the presence of a ramada). Hardesty and colleagues suggest that the station was first occupied and run by Euro-Americans and then expanded and occupied by people of Hispanic origin. Presumably this occurred while the station was still in business. At the very least they occupied the station while travelers were still passing through the area (Hardesty et al. 1994:236,256). Taken alone, this evidence from architecture is somewhat tenuous. To support this assertion, Hardesty et al. (1994) argue that combined with distinctive artifacts that are ethnohistorically linked to indigenous Hispanic populations, architecture is one line of evidence that Hispanic peoples used the station and interacted with Euro-American emigrants.

Though not strongly emphasized in much of the written record, it was also not uncommon for first-generation European immigrants to own and run way stations. The Nostrum Springs Station in Wyoming, for example, was owned and maintained by first generation Swedish immigrants (Burnett 2013). At Head of the Concho Station in Texas, scholars noted a Spanish or Mexican influence as well (Riemenschneider 1996).
Riemenschneider (1996) argues that the station resembled a “posada-like structure,” a type of inn introduced by the Spanish into Mexico (146, 151). He further cites the documentary record, which observes that Mexican workers were present at the station (Riemenschneider 1996:146).

A critical examination of the historical and archaeological records for stations shows that the use of space at way stations in the American West was a combination of building techniques and designs imported from builders’ or owners’ home cultures and of adapting to a new environment. The historical and archaeological records also indicate that these spaces, more permanent than trail routes themselves, were hubs for both peaceful and violent interactions during the process of westward expansion.

**Granite Creek Station in Context**

Based on these observations of the physical and social environments of way stations, Granite Creek can be compared and contrasted with the patterns at these other stations. Though the subsurface testing during the Granite Creek project was limited, when combined with the information gained through pedestrian survey a number of conclusions can be reached regarding the site’s use and occupation history. Interpretations of the trails, buildings, and use of space, in addition to an examination of the dissonance between the written and archaeological records at Granite Creek and how this station compares to the general trends found at stations in the West are presented in this section.

*Granite Creek’s Building Arrangement, Architecture, and Daily Activities*
This project revealed the architecture and building arrangement at Granite Creek Station. The architecture at this station reflects the pattern observed at other Western stations of combining traditional construction methods with adaptations to the local environment. By combining the historical record and recovered artifacts it is possible to identify activity areas at Granite Creek. Feature 1 was likely used as storage or as a stable, Feature 2 was clearly a corral, and Feature 3 was likely a storage building adjacent to the sod station house, Feature 4 (see Table 3.1). Other activities in or near these buildings, such as blacksmithing, and disasters like fire were also identified in the archaeological record of the station.

Granite Creek: A Swing Station

Based on the definitions of station types, Granite Creek was almost certainly a swing station as opposed to a home station or terminal station. Home and terminal stations had sizeable accommodations for travelers and employees. Many had fully functioning hotels with individual rooms. Swing stations were temporary stopping places with facilities for changing teams, making repairs, and sometimes eating or purchasing goods. They were often just a small building or two for eating and for housing staff, and a corral or stable for animals (Hardesty et al. 1994:28-30). Archaeological survey of Granite Creek revealed three small habitation or storage structures and a corral. There was nothing to indicate that stage passengers, emigrants, or other travelers were provided overnight accommodations other than temporary structures such as tents, their own wagons, or the open air, which rules out Granite Creek as either a home or terminal
station as described by historians and archaeologists. Because of the limited accommodations at Granite Creek, it was likely a swing station.

Historical versus Archaeological Records

During archaeological survey at Granite Creek, three features were identified as possible inhabited spaces: Feature 1, Feature 3, and Feature 4. Fortunately for archaeological interpretation of Granite Creek, the newspaper article written in the Humboldt Register in 1865 describes in detail the layout of buildings at the station (Forbes 1865). During the course of this project, however, it became clear that the article did not match the physical remains of buildings, and archaeological testing was needed to identify inhabited structures. Remote sensing and subsurface testing aided in identifying Feature 1 as a storage building or stables and Features 3 and 4 as inhabited structures. Subsurface testing also provided information on the activities that occurred in these spaces.

The historical record for Granite Creek provided a detailed description of building location at the station in order to illustrate the 1865 conflict. According to the Register’s account, the station was arranged in the following way:

♦ The station house was located west of the corral by 30 paces
♦ A storehouse was located 10 to 12 feet west of the station house
♦ The station house was made of sod
♦ The storehouse and corral were made of stone
During the incident at Granite Creek, the American Indians hid and fired from the corral, while the station keepers sheltered in and shot from the sod house (Fairfield 1916:369-371)

Surface and subsurface investigations challenged these descriptions of space at the station. None of the features identified at Granite Creek matched these descriptions flawlessly, though some details matched a few of the features. No possible candidates for the station house were located 30 paces west of the corral, nor was there any mention of a third building. Survey, however, had identified three features that were strong candidates for inhabited buildings. Feature 4 and Feature 3 were located east of the corral instead of west, but one was made of sod and the other of stone, which matched the description of the station house and storehouse architecture. These contradictions are discussed in detail in the following pages and conclusions are drawn about building use.

Buildings at Granite Creek

Feature 1 most closely resembled other swing station houses in the West on the surface, and was initially chosen as the most likely candidate for the main station house. Swing station houses were often two or three small rooms in a building oriented north-south (e.g., Hardesty 1989:15-16, 1978:6; Hardesty et al. 1994:1). Feature 1 was aligned on a north-south axis and contained three small rooms. Metal detecting, however, revealed no discernable “throw zone” or trash scatter around Feature 1, which suggests that Feature 1 was not a habitation structure. This “throw zone” or “trash halo” is
expected around 19th century houses as residents swept trash out of doors and its presence can indicate that a structure was lived in (Wilson 2011).

At other stage stations, archaeological investigations found that station structures that were two to three rooms oriented on a north-south axis, when not clearly inhabited, were used as small stables or for storage (Hardesty 1978a:6). Feature 1 might follow this pattern and may have been used as stables or for storage. Another possibility is that later ranching activities such as vegetation removal or plowing near Feature 1 erased or dispersed any trash scatter that existed outside the walls.

In contradiction to the archaeology, written and oral history partially supports the interpretation of Feature 1 as the station house by process of elimination. The newspaper article titled “The Butchery at Granite Creek Station” reported in the Humboldt Register on April 15, 1865 describes the location of buildings at Granite Creek in detail. According to the article, the stone corral from which local Paiutes made their attack on the station house was located “about thirty paces off, in front of the house” which was located west of the corral (Fairfield 1916:369-371). Thirty paces is roughly anywhere between 46 and 55 meters. The only structure close to thirty paces from the stone corral (Feature 2) and roughly west is Feature 1, which is 40.1 meters northwest. Features 3 and 4 do not fit this description since they are located directly east of the corral over 70 meters away. The article also describes a “storehouse adjoining the dwelling” (Fairfield 1916:369-371). This storehouse may be interpreted as the southernmost “room” of Feature 1. The article, however, claims that this storehouse was west of the house by ten or twelve feet. In sum, archaeological evidence does not support Feature 1 as the station
house, indicating the written history may have been incorrect (see discussion below about multicultural interactions and violence at Granite Creek).

Archaeological evidence, along with some of the historical record, supports an interpretation of Feature 3 or 4 as the station house. If this interpretation is correct, the other could have been used for storage and blacksmithing. The 1865 *Humboldt Register* article points to Feature 4, the earthen foundation, as the main station house since the house is described as having walls made of thick pieces of sod and a shake roof. The “storehouse” is described as being directly behind the sod house, made of stone, and approximately 10 feet long and 6 feet wide (Fairfield 1916:369-370). This description roughly matches Feature 3.

Though these two buildings fit the architectural descriptions in the *Register*, archaeological survey revealed that spatially these structures do not match the report of the incident at Granite Creek. According to the *Register*, the men living in the sod house at Granite Creek defended the house by cutting loopholes for their rifles in the walls of the house “on the side attacked,” meaning the side facing the corral (Fairfield 1916:369-370). This would have been impossible, since the corral was observed directly west of Feature 4, meaning Feature 3 (the storeroom) would have entirely blocked gunfire from both sides. In addition, the “storeroom” was described as 10 or 12 feet back from the main sod house (Fairfield 1916:369-370). Archaeological survey and mapping revealed that Features 3 and 4 were much closer to one another. All of these inconsistencies indicate that the description of the attack is inaccurate, the description of the buildings is inaccurate, or these structures were built after the conflict.
The detailed historical description of Granite Creek Station’s use of space and building location aided to some extent in identifying buildings at the archaeological site. The results of archaeological survey and remote sensing, however, contradicted many parts of this description. Subsurface testing of some of these features helped to more conclusively identify these structures.

Architectural Details and Living Spaces at the Station House and Storehouse

Results from test units placed in Features 3 and 4 supported the structures as formerly inhabited, and yielded artifacts that disclosed information on station life. The units were placed in each feature where the lack of earth or stones indicated a possible doorway, on the north end of Feature 4 and the east side of Feature 3. Metal detecting of the area surrounding Features 3 and 4 revealed a distinct pattern of metal and presumably other artifacts that resemble a “throw zone” or “trash halo” that was common surrounding early- and mid-19th century habitation structures. STP 2, placed northeast of Feature 4 in this concentration, contained artifacts related to health, subsistence and personal adornment including embossed medicine bottle fragments, olive and aqua vessel glass, a comb tooth, a ferrous clothing buckle and ferrous clothing buttons (Figures 4.7-4.10). This halo was only found on the northeast sides of both structures, which may reinforce the initial interpretation of entrance locations of these features. Other excavations at pony express, stage, and telegraph stations in Nevada have found that refuse or the “trash halo” is concentrated in doorways and around the interior of building walls as residents and travelers tossed or swept refuse out the door (Hardesty 1978:54). If this pattern holds at Granite Creek, the doorways of these structures are likely on the north or east sides of
Features 3 and 4. Metal detecting seems to suggest this, and additional test units may corroborate this pattern.

The test unit excavated in Feature 3 (F3U1) aided in identifying an occupation layer for the station. Beneath Strata I and II (both deposited after the structure was inhabited) was Stratum III, a coarse sand and clay layer. This stratum contained the majority of artifacts recovered from the unit including nails, a bolt, and unidentifiable ferrous metal fragments. These artifacts were not deposited in a thin layer but were found

Figures 4.7 and 4.8. Embossed medicine bottle (left) and ferrous clothing buttons (right) from STP 2.

Figure 4.9. Comb tooth, found in STP 2 near Feature 4.
throughout Stratum III. If Feature 3 were a habitation structure a hard-packed dirt floor might be expected. No such hard-packed living floor was found in F3U1, but this does not mean that Feature 3 was not a living structure. Hardesty (1989:16-17) found in his excavations of Sand Springs, Cold Springs and Desert Stations in Nevada what he termed a “living zone,” a churning and mixing of cultural debris and soil matrix when human activity occurs on a soft surface such as sand. F3U1’s sandy, artifact-filled layer is likely a similar “living zone,” and this sandy Stratum III is the living floor. Further, the low density of artifacts and lack of artifacts beyond architectural hardware (nails, bolt) may support the interpretation of this part of Feature 3 as a high traffic or entrance area, as similar interpretations have been proposed at other way station sites (Dixon and Hardesty 2000:53). At the very least, it supports the interpretation that Feature 3 was inhabited or used frequently due to the low concentration of artifacts inside the structure, especially when compared to the higher concentration identified just outside the walls to the north and east. Below Stratum III the unit was sterile through Stratum IV and V, and though
there was a thin and spotty charcoal layer observed (Stratum V), its depth and lack of associated artifacts indicates a pre-station origin.

Based on written and oral history, Feature 4 was hypothesized to be either the sod station house described in the *Humboldt Register* or the defensive pit dug by Cy Mulkey for protection (see Granite Creek’s history in Chapter 1). The test unit in Feature 4 (F4U1) was placed in what was posited as the entrance of this feature on the northern end. No artifacts were recovered from this unit and there was no charcoal. What appeared to be the same sandy stratum observed in Feature 3 (Stratum III) that yielded artifacts was present at approximately the same depth in Feature 4. The continuity of this strata and especially what appeared to be the same “living zone” strata at approximately the same depth as F3U1 (though devoid of artifacts in this case) suggest that this structure was not excavated into the ground, supporting its interpretation as the remains of a sod house rather than a defensive pit or dugout. The dimensions of the rectangular earthen berms also conform to common traditional sod house dimensions after Welsch (1968), roughly 16 x 24 ft. In addition, the pattern of metal revealed through metal detecting that surrounded Feature 4 and appeared to be a typical “trash halo” further support its interpretation as a habitation or storage structure. The lack of artifacts within F4U1, especially when compared to the abundance of metal surrounding Feature 4, also suggests this area was a living floor as residents swept trash out the doorway. The lack of artifacts within F4U1 compared to the abundance of refuse surrounding the exterior of Feature 4 may also confirm this area as a doorway, as residents swept trash out of the entrance.
A review of archaeological projects conducted at dugout and sod house sites indicates that the scarcity of artifacts recovered in F4U1 is not uncommon at dugout and sod structure sites, which often contain much fewer artifacts than other contemporary dwelling and homestead sites for unknown reasons (Linebaugh 2005:73-75). The lack of artifacts in F4U1 makes comparison with Feature 3 difficult, and there is not enough evidence to support speculations on whether either structure was used for habitation or for storage. Further testing of some of the components of Feature 4 and adjacent small earthen berms may provide clues about the structure’s use, since wells or cisterns were often sunk adjoining or a few meters away from sod houses (Figure 4.11; Welsch 1968). Because of this, the sunken component on the southeastern elevation of Feature 4 deserves subsurface investigation (see Figure 3.24).

Figure 4.11. Example of a sod house in Nebraska. The barrel sunk into the ground near the corner of the house was a cistern (Welsch 1968:114).
Based on constraints and due to the pattern of metal surrounding Features 3 and 4, a shovel test pit (STP 2) was placed just outside of Feature 4 northeast of the feature. Small sub-surface metal detector tests had already revealed artifacts including glass, metal and ceramic as well as a deposit of charcoal. STP2 was intended to investigate the presence of intact stratigraphy associated with these artifacts and determine if the burned layer was substantial. STP2’s stratigraphy was similar to that observed in F3U1. The first two strata, I and II, were identical to Stratum I and II in F3U1. Stratum III in STP 2 was a 2-3 cm thick charcoal layer full of numerous artifacts. Below the charcoal was a layer very similar to F3U1’s Stratum III (STP 2’s Stratum IV), a coarse clay and sand mixture full of artifacts (Figure 4.12). This, and the charcoal Stratum III above it, was likely the same “living zone” identified in the sandy stratum of F3U1. Stratum IV, equivalent to F3U1’s Stratum III, was likely the sandy habitation layer deposited at the same time Features 3 and 4 were occupied. It probably represents a portion of the trash halo around Features 3 and 4 that residents and travelers deposited by throwing trash out doors or windows. The burn layer in STP 2 and the warped artifacts found within this layer indicate Features 3 and 4 burned at some point in their past, possibly as part of the conflict described by the *Humboldt Register* in 1865.

The lack of this burned stratum inside Feature 3 and Feature 4, the proposed station house and storage building, warrants additional discussion. Though the burned layer was found outside Feature 4 in STP 2, it was not present in either F3U1 or F4U1. If these structures had been burned, this layer should also have been present. There are two possible interpretations, and the limited archaeological testing has produced evidence that points to both explanations.
The first is that Features 3 and 4 may be the original station and storage buildings that were burned and were cleaned out after the fire, reused, and inhabited. The spotty charcoal found in F3U1 may support this interpretation; as the building was swept out, not all of the charcoal was removed. The charcoal and metal concentration around Features 3 and 4 may be evidence of this cleaning, as charred earth and trash were swept out of the doorways so the buildings could be repaired and reused.

The second explanation for the lack of charcoal in Features 3 and 4 is that the original station buildings were located close to these features, producing the burned layer observed in STP 2, but Feature 3 and Feature 4 were built after the fire. There are two small mounds of earth directly east of Feature 4 surrounding a slightly depressed area. One of these is visible on the Feature 4 map northeast of the main structure while the other is a larger, oval shaped mound a few meters east (Figure 4.13). It is possible that these mounds represent portions of the original sod station house. According to the documentary record, the Idaho and California Stage Company still ran stages through Granite Creek after the 1865 conflict until 1867, and the military established Camp McKee at the station after the incident. Features 3 and 4 could be buildings constructed by the stage company or the military after the station was burned.

Because no charcoal was found in Feature 4, this second explanation is the more likely of the two. Features 3 and 4 were likely built after the fire due to the lack of charcoal recovered from F3U1 or F4U1. Their similarity to the description in the Register, however, indicates that they were likely rebuilt in a manner closely aligned with the original building techniques and resulting structures.
Daily Activities at Granite Creek

A few artifacts found in the metal concentration around Features 3 and 4 provide information about activities at these buildings. A large piece of slag recovered near Feature 4 suggests that blacksmithing may have occurred on site, and this would not be out of character at stage or way stations in the West (Figure 4.14; Hardesty et al. 1994:31; Hardesty 1989; Burnett 2013). Blacksmithing was a vital part of stage and emigrant station operation. It was needed to repair animal tack such as harness parts, animal shoes, and wagon and coach hardware. The historical record for Granite Creek Station also mentions a bellows and tools destroyed during “The Butchery at Granite Creek” in 1865,

Figure 4.12. Artifacts from STP 2 Stratum IV, the sandy “living zone.” Pictured are olive and aqua vessel glass, nail and bone fragments, and a comb tooth.
which again indicates that blacksmithing may have been present (Forbes 1865; Fairfield 1916:369-371). Medicine bottles, vessel glass, the piece of the hair comb, and metal jacket buttons point to the everyday activities that occurred in these buildings as individuals treated themselves for illnesses, ate and drank, and practiced personal hygiene.

**Trails and Roads at Granite Creek**

In addition to buildings, there were spaces for travel and transportation at Granite Creek Station. A significant number of features at the station were remnants of trails and roads. It was not uncommon at way and stage stations for there to be a number of trail fragments from different occupation periods (Dixon and Hardesty 2000). This trend was

![Figure 4.13. Small mounds near Feature 4, possibly the remains of earlier buildings. Facing southwest.](image)
present at Granite Creek. There were segments of original Nobles Trail, portions of the stage and freighting road, and roads from 20th-century ranching.

Features 10, 14, and 15 were all remnants of trails and roads that passed through Granite Creek (see Figure 4.17). Feature 10 was a short section of trail that took the form of a swale. Metal detecting along the entirety of this feature revealed animal shoes, a ferrous wedge or spike, and a bullet that dates to the mid-19th century (Figures 4.15 and 4.16). This evidence, along with Feature 10’s clear shape as a swale and its relatively narrow width, indicate that this may be an earlier section of trail than Features 14 and 15. It is possible this is a segment of the original Nobles Trail emigrants took as they left Granite Creek.

Metal detecting of Feature 14, consisting of two shallow swales roughly parallel to one another, revealed no artifacts that dated earlier than 1887. These later dates suggest
that this portion of road was used later than the way station-stagecoach component of the site, though many original trails and roads were reused in the American West (Schlereth

Figure 4.15. Animal shoes and a spike found in Feature 10.

Figure 4.16. Mid-19th century spent bullet recovered in Feature 10.
It is possible that Feature 14 was part of original trail that was later reused by ranchers, homesteaders and travelers.

Feature 15 consisted of wide trail paths through the vegetation on site and an open meadow that had been trampled. Because of its width, Feature 15 may represent the Fort Kearny-South Pass-Humboldt-Honey Lake Wagon Road that was improved by F.W. Lander in 1860 and later by the Idaho and California Stage Company in 1865. It is likely that this section of the trail is wider at Feature 15 because emigrants, stagecoaches and travelers pulled off of the road in this area to access the two buildings (Features 3 and 4) just south of Feature 15 (Figure 4.17).

Evidence of animal equipment near Features 3 and 4 (including metal harness rings and animal shoes), demonstrate that horses, mules or oxen were present near these features (Figures 4.18 and 4.19). The open, vegetation-free dry meadow in the middle of Feature 15 (represented in Figure 4.17 by the dashed line) suggests that wagons or stagecoaches pulled off the road to rest, camp, change teams, and repair equipment at Features 3 and 4.

Projecting the now-extinct portions of Features 10, 14, and 15 west indicate that they converged in the same area, where the modern gravel road that bisects the ranch east-west meets the western fence line. From here, the trail likely curved south to meet the section of Nobles Trail-Humboldt Wagon Road that was confirmed to the southwest of Granite Creek (Figure 4.20). The gravel road that bisects the ranch east-west and Highway 34 are also likely old trail paths. At a way station like Granite Creek, it is not surprising that there would be multiple trails at and around the station as emigrants and travelers spread out to camp, trade, and obtain water before resuming the journey.
Figure 4.17. Map of Feature 15’s proximity to Features 3 and 4 (highlighted in red).
Figure 4.18. Possible harness or bridle rings recovered near Features 3 and 4.

Figure 4.19. Ox shoe recovered near Features 3 and 4.

west. This pattern of multiple trail paths has been found at other stations, including Davis Station in California, where multiple trail paths were observed in the vicinity of the station (Dixon and Hardesty 2000).

Granite Creek as a Station and Farm
The historical and archaeological record support the interpretation of Granite Creek Station as a way station and as a working farm or ranch. The historic record is full of references to Granite Creek’s use as a place for haying and purchasing products from cattle. Owner Cyrenius Mulkey claimed that Granite Creek’s conditions were good for haying—this was the reason he settled the area (Mulkey 1910:92; Lockley 1914:8). Emigrants also purchased butter at the trading post here, indicating cattle were either on site or nearby (Taylor 1861). In their “Butchery at Granite Creek Station” article, the Humboldt Register lists a haypress and a reaper among the items destroyed by the Indians and by fire, indicating that crops were harvested at Granite Creek (Fairfield 1916:371). According to the historical record and other archaeological projects conducted at stagecoach stations, it was not uncommon for stage and way stations to function as ranches or for station owners to grow hay (Berge 1968; Jackson 1982; Mackey 1994; Hardesty 1978; Hardesty et al. 1994; Dixon and Hardesty 2000:56).

Archaeological evidence may also support Granite Creek’s simultaneous use as a ranch and stage station. Through archaeological survey of Granite Creek, multiple structures were identified over a relatively dispersed area. Features 1, 3, and 4 were all likely habitation structures or used for storage, and Feature 2 was a sizeable corral. Because of these multiple structures and their dispersed nature, Granite Creek Station likely falls in the category of a farm or ranch, though perhaps a relatively small-scale operation due to the limited number of outbuildings. In their review of stage stations recorded throughout Arizona, Colorado, New Mexico, Texas, Kansas, Nebraska and Nevada, Hardesty et al. (1994) concluded that specialized swing stations were often just a building or two that housed staff and a corral or stable for animals with few outbuildings,
Figure 4.20. Map of Granite Creek’s trail features (10, 14, 15) converging west on the original Nobles Trail. Projected trail paths represented with black arrows.
while swing stations that functioned as ranches or farms had multiple outbuildings scattered over a dispersed area (Hardesty et al. 1994:31).

Recovered macrobotanicals during subsurface testing near Feature 4 also support the interpretation of Granite Creek as a farm. While processing one of the ferrous, burned harness rings recovered near Feature 4 in UNR’s historic archaeology lab, burned seeds later identified as wheat seeds fell out of the center of the ring (Figure 4.21). Wheat is not currently grown on site, and the seeds’ location inside the ring support the interpretation that the seeds were deposited during Granite Creek’s use as a way and stage station. Though it is possible that wheat was transported to Granite Creek from elsewhere, when combined with other documentary and archaeological evidence these seeds may further support Granite Creek’s use as a ranch or farm at the same time it was a way station.

![Figure 4.21. Burned wheat seeds, found inside ferrous harness rings.](image)

Like many other way stations that doubles as farms in harsh environments, water control was critical at Granite Creek Station. Several features at Granite Creek represent
attempts at modifying the landscape to enhance its productivity, especially by directing water from the spring that emerges at Granite Creek. Features 7 and 8, both earthen berms, are likely attempts to keep water in the meadow around Feature 2 (the corral). The placement of Feature 7 and 8 suggest that they were constructed to keep water in the meadow to the west and to keep water away from Features 3 and 4, which were likely habitation or storage structures (Figure 4.22). By keeping this meadow green, the station owners ensured that livestock corralled in and around Feature 2 would have access to good grass and water for drinking. Controlling water also allowed station owners to keep crops alive. Features 11 and 12 are modern earthen berms intended for controlling the same body of water.

Granite Creek’s architecture, living spaces, and landscape use display similarities to other stations in the West. Like many stations, Granite Creek Station was made from local materials and at least one building (Feature 1) displays the traditional north-south building alignment. The station had multiple trail paths and was likely used as a farm based on the dispersed building construction and presence of wheat seeds. The activities that took place in Granite Creek’s living spaces were similar to those at other stations as well, including blacksmithing, consuming patent medicines, and practicing personal hygiene. Other aspects of Granite Creek’s architecture and use of space are unique, including using sod for a living structure, the particular local construction materials used, and the specific manner of water control used at the station. Even more unique were Granite Creek’s multicultural interactions that took place in these spaces.
Challenging the Historical Record of Conflict at Granite Creek Station using Critical Archaeology

Historical and archaeological records are often difficult to reconcile, especially when they do not directly contradict one another. One of the goals of the archaeological project at Granite Creek was to investigate the claims of violence in the 1865 Humboldt Register article on the station. The archaeology at Granite Creek challenged the full account of this conflict, while at the same time confirming some parts of the Register’s story. By using critical archaeology to place the Register’s story in context with regional events and social conditions, this complicated dissonance may be explained.

Some of the archaeological evidence supports the claims in the Humboldt Register of an attack on Granite Creek by local Paiutes. Heavily burned Stratum III in STP 2 and its burned and melted artifacts corroborate the historical account in the Register of the station being burned during the conflict. The burned and warped condition of the artifacts from STP 2 further supports the description in the paper that noted items such as tools, cooking pots, and the stove were intentionally destroyed before the station was burned (Fairfield 1916:39-371).

Further supporting the Humboldt Register’s account of the mutilations of the men present at Granite Creek Station during the incident is the fact that they were not out of place with contemporary conditions and events locally and regionally. Reports from the northern Great Basin during the Snake War (1864-1868) contain very similar descriptions of extreme violence and mutilation on individuals at stations, camps, mining claims, and other settlements (Michno 2007). Some of the details are essentially the same; individuals
were staked or held down and burned, and all equipment, tools, and buildings were destroyed (Michno 2007:129).

Figure 4.22. Map of water control features at Granite Creek.
Gualtieri’s (2006) recent examination of the extent of violence at Granite Creek reported in historical documents provides a possible explanation for these actions, lending further credence to the reported hostility during the 1865 conflict. Gualtieri argued that the specific kinds of damage done to the bodies of the station keepers and the station buildings and belongings closely resembles how Northern Paiutes dealt with witches and witchcraft. Conflict with American Indians is also not out of place at way stations across the West based on the documentary and archaeological records (Berge 1968:177,236; Riemenschneider 1996:147; Ashmore 2010). It is therefore possible that the historical record of these events at the station is not entirely fabricated.

Other parts of the archaeological record at Granite Creek, obtained through remote sensing and subsurface testing, suggest that the story in the Register was exaggerated or fabricated. According to the paper, the battle between the station keepers and local Northern Paiutes lasted anywhere from half a day to three days, with so much ammunition spent that “the whole front of the corral is bespattered with lead of the bullets fired from the house” (Fairfield 1916:369). Both sides reportedly ran out of ammunition, which forced the Paiutes to try and burn the station house and the station keepers to flee across the playa (Fairfield 1916:369-370). The entirety of Feature 2, the stone corral, was metal detected and revealed no spattering of lead as reported. Near Features 3 and 4 there was a fired bullet and a few pieces of melted lead that are likely remnants of bullets based on their size, but still no heavy concentration of bullet remains. This suggests that the “battle” did not occur precisely as the Register reported it, a fact already discussed above in regard to the placement of the buildings.
It is likely that a skirmish of some kind did happen at Granite Creek Station, an assertion supported by the presence of the heavily burned layer in STP 2, but the archaeological evidence does not support a sustained battle at the site, nor does it necessarily place blame on local Paiutes. If there was a fight, it was on a much smaller scale than reported by the Register.

This dissonance between the archaeological and documentary records on American Indian and Euro-American settler relations is not uncommon for this time. Incidents involving violence between these peoples were often embellished or entirely fabricated to incite anger and prejudice among Euro-Americans against local American Indians in competition for territory. As mentioned in Chapter 2, some versions of the story about the attack on the station that triggered the Pyramid Lake War of 1860 claim that Euro-American settlers perpetrated the attack and blamed local Paiutes for the violence (Hardesty 1978b:7).

Archaeological investigations at other sites of conflict in the American West have uncovered specific evidence of Euro-Americans framing American Indians for violence. The archaeological project at the site of the Mountain Meadows Massacre in Utah is a good example of this kind of critical archaeology. By examining the osteological remains of emigrants supposedly killed by American Indians, Novak and Kopp (2003) found that there was no evidence to implicate American Indians in the murders. Based on the dissonances in the written and archaeological records for this site, Novak and Kopp argue that local Euro-American (specifically Mormon) militia committed the act and placed blame on local American Indians (Novak and Kopp 2003:102). Such may be the case for Granite Creek, especially given that there was such an intense and targeted campaign by
Euro-American settlers to eradicate local bands of American Indians in the Black Rock region during the 1860s (Michno 2007). At the very least, it is likely that the Register was affected by the prejudice present in this conflict. The paper may have also been trying to provide entertainment for its readers with dramatic stories of the “wild west” (Layton 1977).

After this incident, historical documents state that the military occupied Granite Creek intermittently from 1865-1868 (Carlson 1974: 161; Mordy and McCaughey 1968: 185; Frickstad 1958: 38; Brock and Black 2008: 34; Hart 1965: 144). It was not uncommon for military detachments to be temporarily stationed at way stations when there was conflict in the area. Johnson’s Station in Texas, for example, was temporarily occupied by troops in response to continued Comanche attacks on the station (Ashmore 2010:14). Archaeological testing at Granite Creek did not reveal any artifacts specific to military occupation, so the military presence at Granite Creek cannot be confirmed archaeologically at this time. Several bullets and cartridges were recovered in portions of trail (Feature 10), in the Open Passage Area (OPA), and surrounding Features 3 and 4. Most of this ammunition, however, dated much later than Granite Creek station and included a Winchester rifle casing introduced in 1955, a 32 Remington Special introduced after 1911, and more (Harrell and Reher 1991). None of the bullets and cartridges that did date to Granite Creek’s occupation, such as two Henry rifle cartridges from the 1850s-1860s, were strictly military issue either, meaning they cannot conclusively support a military presence.

One particular artifact recovered at Granite Creek is an appropriate representation of the difficulty in determining who perpetrated the 1865 incident and whether it
occurred at all. A worked obsidian flake was found crushed inside an 1860s Spencer rifle cartridge (Figure 4.23). Whether the flake was crushed in the cartridge by chance or if someone intentionally placed the flake inside and crushed the cartridge is unknown.

Similarly, archaeological and historical records for Granite Creek do not provide a conclusive answer to whether the 1865 incident happened or whether it involved American Indians. The archaeological results concluded that the station burned, but not that it was involved in a conflict. Using a critical archaeological lens, it is clear that the generally accepted version of the incident at Granite Creek may not be accurate, and that local settlers and the Register had significant motives for placing blame on local American Indians. Though beyond the scope of this project, consultation with local tribes surrounding the Black Rock would likely add a valuable voice to this debate and may illuminate the claims of violence at Granite Creek.

It is clear that Granite Creek’s unique location and historical conditions fostered a complex and sometimes tenuous social environment. This kind of environment was common at many way stations in the West, but Granite Creek’s unique locational and social conditions produced its own distinctive relationships and conflicts. Archaeological investigations at the station have helped illuminate these relationships while challenging the popularized images of a homogeneous station environment.

**Conclusions**

Though an historical record exists for the process of 19th century westward expansion, archaeology can both challenge and affirm these written records. Because the
process of westward expansion itself is often portrayed in popular culture as a simplified image, expanding the understanding and experience of this process is a worthwhile endeavor. The simplified image of emigration typically consists of a single or handful of poor to middle class Euro-American households leading their wagons West. The review of way stations presented here challenges this one-dimensional view, illustrating that trails and the stations that served them were visited and inhabited by a variety of individuals. It also illustrates some of the ways that station builders utilized local resources while preserving some of their traditional elements of the built environment.

The particular station examined in detail for this project, Granite Creek, is an excellent example of these themes. This station embodied construction techniques,
architecture, and social atmosphere found at many other stations. Granite Creek exemplified the ways in which station builders utilized local resources while retaining some traditional construction elements. The builders at Granite Creek utilized native granite stone and sod while keeping to the roughly north-south alignment of buildings found at other stations. Like many other stations, Granite Creek likely functioned as a farm or ranch in addition to a station based on building location, water control features, and macrobotanical remains recovered during excavation. The station also exemplified the diverse social environment at stations.

The archaeology conducted at this station also contested aspects of the historical record and showed the ways in which Granite Creek was unique. Metal detecting revealed no spattering of bullets against the corral or in any other area of the station as claimed by the Humboldt Register. This lack of spent ammunition challenged the historical claims that a prolonged battle took place between the station keepers and local American Indians. The station keepers’ solution to the issues of water control by building berms in order to feed cattle and grow crops is also specific to Granite Creek’s unique landscape and environmental conditions.

Studying Granite Creek and other way stations in the depth of detail that archaeology provides allows for broadening the understanding of westward migration. Critically examining the physical and social spaces fill in some of the details of everyday life at stations while challenging the perception of stations as homogeneous spaces. A survey of the archaeological literature on stations supplemented with Granite Creek’s results indicates that stations were a mix of conservative building techniques combined
with adaptations to local environments, and that they were frequently social centers during the process of local settlement.

On a broader scale, studying emigrant trails and stations can answer Dixon’s (2014) call for integrating research themes commonly pursued in the American West and Pauls’ (2006:67) appeal for integrating local and regional investigations into human impacts and the human experience. Careful and close examination of trails, campsites, stations, and the broader forces at work behind these places can add to and broaden archaeological explorations of landscape transformation, colonialism and colonization, and migration, which can answer questions about the past and also about the present and future. Migration and settlement in the West had significant effects on the landscape through extracting natural resources and a steep increase in human population and the built environment (Hardesty 1986; Mrozowski 2006; Dixon 2014). By looking at way stations across the West to elucidate patterns in the use of social and physical space while investigating Granite Creek in detail, this project has provided both a regional and local study of stations and westward expansion.

Emigration to the West had a massive impact on American Indian, migrant, and immigrant cultures, the processes and outcomes of which can potentially shed light on the state of present and future environmental conditions and cultural interaction and change (Dixon 2014). Additionally, archaeological study of culture contact often does not go beyond the initial phase of colonization in the 18th and early 19th centuries and “native peoples essentially disappear from the archaeological literature with the advent of American colonialism” (Lightfoot 2006:282). Emigrant and immigrant interaction with American Indian and immigrant populations, however, continued to be a decisive
influence on continued settlement of the West and deserves more careful examination (Tate 2006; Lightfoot 2006; Dixon 2014). The possible framing of American Indians for violence or accidents perpetrated by Euro-Americans also deserves further investigation. This project provided a platform on which to expand the study of these interactions and claims of violence during and after western settlement by examining these relationships at stations.

As the nodes and channels of westward expansion and colonization in the American West (Hardesty et al. 1994), this project has shown that station were places of cultural contact and exchange between American Indian groups, Euro-American migrants (Tate 2006), European immigrants (Burnett 2013), Hispanic and Mexican peoples (Hardesty et al. 1994), Chinese workers (Dixon and Hardesty 2000), free and enslaved African Americans (Schlissel 1992), and others. As demonstrated while investigating the supposed battle at Granite Creek, archaeology specifically can challenge the image of homogeneity at stations, broaden understandings, and uncover some of the complexity of the emigrant/immigrant and American Indian experience of the westward expansion process.

Emigrant trail and way station archaeology is therefore important on multiple levels. It can add to an area of archaeological study that has generally been ignored from an academic standpoint, reexamine the master narrative about early westward expansion and the emigrant experience, help integrate several themes that multiple historical archaeologists have cited as essential to the future of historical archaeology in the American West, and possibly provide helpful information about landscape modification and cultural interaction that can inform the past, present and future.
Works Cited

Amesbury, Robert

Ashmore, Tom
2010   Archaeological Investigations Johnson’s Station (41IR123) Irion County, Texas. Report Produced for the Concho Valley Archaeological Society. From Concho Valley Archaeological Society, Texas.

Bagley, Will

Bennett, Elizabeth, Laura Sechrist and Carolyn White
2014   Class III Survey and Testing of Granite Creek Station and Trails Site. Unpublished report for BLM. Manuscript on file, Anthropology Department, University of Nevada, Reno.

Berge, Dale L.
1980   Simpson Springs Station: Historical Archaeology in Western Utah. Cultural Resource Series No. 6, Bureau of Land Management, UT.

Brock, Richard K., and Robert S. Black

Buck, Donald, Andrew Hammond, Thomas Hunt, David Johnson, John Maloney

Buhr, Larry
1999   Report on Feature 1 Artifacts from the Jacobs Well Station Site, White Pine County, Nevada, for the 1997 Field Season. Report draft, unbound, on file at University of Nevada, Reno Anthropology Department.

Bureau of Land Management (BLM)
Burnett, Katherine L.
2013 “The Most Thrilling Event of the Night was the Arrival at the Stage Station:” The Nostrum Springs Stage Station, Thermopolis, Wyoming in Archaeological and Social Context. Doctoral Dissertation, Anthropology Department, Indiana University.

Carlson, Helen S.

Carson, Scott Alan

Casper, Scott E. and Lucinda M. Long, eds.

Curan, Harold

Davis, George Grove
1860 An Outline Sketch of the Travels and Adventures of George Grove Davis and Family Over the Plains or Great American Desert in 1860. Diary. Typescript copy in private possession.

DeGroot, Henry

Dixon, Kelly
Dixon, Kelly J. and Donald L. Hardesty.  
2000  An Archaeological Evaluation of Two Way Stations Along Henness Pass Road: Davis Station Site and Negro Tent Site. Report for United States Forest Service. Copy on file at University of Nevada, Reno Historical Archaeology Lab.

Dixon, Kelly J., Julie M. Schablitsky, and Shannon A. Novak, eds.  

Dreibelbis, John A.  

Fairfield, Asa Merrill  
1916 *Fairfield’s Pioneer History of Lassen County, California to 1870*. H. S. Crocker Company, San Francisco, CA.

Faragher, John Mack  
1979 *Women and Men on the Overland Trail*. Yale University Press, New Haven, CT.

Favour, John  
1859  Diary. Bancroft Library, University of California, Berkeley, CA.

Fletcher, F. N.  

Forbes, W.J., ed  
1865  The Butchery at Granite Creek Station. *Humboldt Register* April 15, 1865:2.

Frickstad, Walter N., and Edward W. Thrall  

Goodwin, Victor O.  

Gualtieri, Michael Allen  
2006  *The Role of Moral Outrage in the Northern Paiute Wars of the Mid-19th Century*. Doctoral Dissertation, Anthropology Department, University of Oregon, Eugene, OR.
Hardesty, Donald L.
1978b Historical, Architectural, and Archaeological Studies of Fort Churchill, Nevada. Report submitted to the Nevada Division of State Parks, Carson City, NV.
1986 Issues Regarding the Conduct of Historical Archaeology in Nevada. *Nevada Council of Professional Archaeologists, Publication Series No. 1*.
1994 Class, Gender Strategies, and Material Culture in the Mining West. In *Those of Little Note: Gender, Race and Class in Historical Archaeology*. University of Arizona Press, Tuscon, AZ.

Hardesty, Donald L., Richard F. Carrillo, Steven F. Mehls, Jane L. Anderson, Thomas J. Lennon

Harolds Club
1951 *Pioneer Nevada*. Harolds Club, Reno, NV.

Harrell, James H. and Charles A. Reher

Hart, Herbert M.
1965 *Old Forts of the Far West*. Superior Publishing Company, Seattle, WA.

Hawkins, Bruce R. and David B. Madsen
1990 *Excavation of the Donner-Reed Wagons: Historic Archaeology Along the Hastings Cutoff*. University of Utah Press, Salt Lake City, UT.
Helfrich, Devere, Helen Helfrich and Thomas Hunt

Jackson, W. Turrentine

Jones, Peggy McGuckian

Jordan, Terry G., J.T. Kilpinen and C.F. Gritzner

Lavender, David

Layton, Thomas N.

Leone, Mark P., Parker B. Potter, Jr., and Paul A. Shackel

Lightfoot, Kent G.

Linebaugh, Donald W.

Lockley, Fred
1914* In Earlier Days. *Oregon Journal, April 8-10.*
Mackey, Barbara Jane  

McBride, Terri  

McIntosh, Clarence F.  

McPherson, William Gregg  

Michno, Gregory  

Moody, Ralph  

Mordy, Brooke D., and Donald L. McCaughey  
1968  *Nevada Historical Sites*. University of Nevada Press, Reno, NV.

Mrozowski, Stephen A.  

Mulkey, Cyrenius  

Myhrer, Keith, William G. White, Stanton D. Rolf  

National Park Service (NPS)  
2010  Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails Long-Range Interpretive Plan. National Trails Intermountain Region, Harpers Ferry Center.
Nevada State Journal

Novak, Shannon A. and Derinna Kopp

Pauls, Elizabeth P.

Peterson, Heather King

Plat Map
1908  Plat Map, T33N R23E. Nevada State Historical Society, Reno, NV.

Potter, Jr., Parker B.
1992  Critical Archaeology: In the Ground and on the Street. *Historical Archaeology* 26(3): 117-129

Purser, Margaret

Randall, J.D.
1852  Diary. Nebraska State Historical Society, Lincoln, NE.

Rathbun, Daniel C.B.

Reid, John Phillip

Reno Evening Gazette

Riemenschneider, Larry

Robert A. Allan Papers
1854  “Speech of the Hon. WM. H. Nobles Together with Other Documents Relative to An Emigrant Route to California and Oregon through Minnesota Territory.” Olmstead and Brown, Territorial Printers, Saint Paul. Nevada State Historical Society, Reno, NV.

Schlereth, Thomas J.
1997  *Reading the Road: U.S. 40 and the American Landscape*. University of Tennessee Press.

Schlissel, Lillian

Smith, Raymond M.
1996  *Nevada’s Northwest Corner: The Black Rock Country of Northern Humboldt, Pershing & Washoe Counties*. Silver State Printing, Minden, NV.

Smith, Regina C., Peggy McGuckian Jones, John R. Roney, and Kathryn E. Pedrick

Storey, Danielle
2007  *The Archaeology of Hickneytown: An Examination of Class Identity in a Late Nineteenth Century Mining Settlement in the Spruce Mountains Mining District*. Masters Thesis, Department of Anthropology, University of Nevada, Reno.

Tate, Michael L.

Taylor, Ruth Eliza Warner
1861  A Letter Home—1861. Plumas County Historical Society, Quincy, CA.

Valenčius, Conevery Bolton
Welsch, Roger L.
1968  *Sod Walls: The Story of the Nebraska Sod House*. Purcells, Inc, Broken Bow, NE.

West, Elliot

Wheeler, Sessions S.
1971  *The Nevada Desert*. The Caxton Printers, Ltd., Caldwell, ID.
1978  *Nevada’s Black Rock Desert*. Caxton Printers, Caldwell, ID.

Wilkie, Laurie A. and Kevin M. Bartoy

Willoughby, Robert J.

Wilson, Douglas C.
2011  Hawaiian Presence at Fort Vancouver National Historic Site. Paper presented at the Society for Historical Archeology's Conference on Historical and Underwater Archeology, Austin, TX.

Wilson, John S.
1859  Diary. Beinecke Library, Yale University, New Haven, CT.

Zanjani, Sally