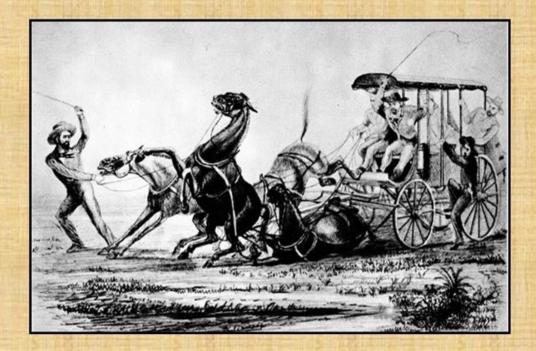
The Butterfield Trail Through The Concho Valley And West Texas



Tom Ashmore 2019

Updated 2021

Forward

Over a ten plus year period it was my pleasure to work with Tom Ashmore on numerous Concho Valley Archeology Society projects. One of the major projects was a CVAS project at Fort Chadbourne, which lasted for 5 or 6 years. Other projects included rock shelters on the Nature Conservancy property along Independence Creek over a 4 or 5 years. Others include Horsehead Crossing and the immigrant Trail at the Green Mounds. Last but not least are the two lost Butterfield stage stations, Johnson station and Grape Creek station.

Johnson station and Grape Creek station as we know them were no longer visible to a person casually passing close by. Even the ranch owners were unaware of the location of either Butterfield site. Now that these sites are uncovered after years of being lost to posterity we can confidently pass along to those that follow us our knowledge of where these long lost sites are located. It was my pleasure to work with Tom on this project over about a 10 year time period. After gaining permission from the property owners we were allowed to access the general area and begin our search for the exact site. If it were not for Tom's skill in reading satellite maps and his skill in following the scar left on the land by the mules and the stage coaches we would have never found the sites. I can honestly say that I was a skeptic at first in reading the satellite facts but after Tom educated me on how to use the tools I came to be a believer in the latest modern day technology, which helped us solve a mystery. I really became a believer in the use of the new technology when Tom and I went to the ranches to match up the satellite picture with the ranch land. With satellite map in hand we found where the stage line crossed the main ranch road near the Grape Creek Station. We walked the stage trail in multiple places near the Grape Creek Stage Station and our satellite guidance maps opened these doors for us. Again I'll say that without Tom's skill in reading satellite maps and his application of this modern technology we would have never found the Johnson Station or the Grape Creek Station. I am a firm believer in the use of this technology and I attach my name to Tom's report concurring with his findings.

On the Grape Creek site Tom and I worked the site on the weekends and used our metal detectors to pin point the metal objects remaining. During the week it was my job to search the archives at Fort Concho reading the Scouting reports looking for any mention of the Grape Creek Station by the cavalry. We also looked into historical articles for mention of the Grape Creek Station. We came upon an article in Marvin Hunter's magazine from 1911 by Emma Elkins, which shed light on what happened when the Indians attacked. Of course we referred to the Conkling books repeatedly to be certain that we stayed accurate with our work in the field.

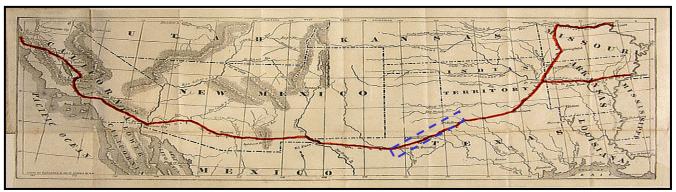
Surely those that follow us will find our efforts to be beneficial and will expand their knowledge of an important time in the Concho Valley. I am proud to have been a part of this team effort and greatly appreciate Tom sharing with me his skills acquired in satellite map reading acquired during his 20 years in military intelligence. C.A. Maedgen, III Region 10 Director for TAS 1/9/2019 SMU BS Geology 1966,

SMU MFA Communications 1968

Introduction

One of the most significant periods in West Texas was the period of pre and post-Civil War. This period saw exploding expansion in our country as emigrants made their way through this area to points further west, mostly New Mexico and California. This brought about the Butterfield Stage line from 1857 to 1861, as well as settlers, cattle drives and trade caravans on this same trail. It also brought with it the Indian wars as the Apache and Comanche viewed this expansion as encroachment on their land so necessary to the survival of their tribes. As the attacks on settlers and emigrants increased it brought more military camps and forts to the region. As such, studying the various locations related to these times is significant to clarifying the people and events of those times.

The West Texas section of the Butterfield Trail was one of the most difficult for stagecoach travelers. When they left Fort Chadbourne heading west they knew they were in for a rough ride. Because the trail ran through a dry and unpopulated country - and the fact that it continued to be used long after the Butterfield Overland Mail was discontinued in 1861 - the impression can still be seen by a trained eye through satellite imagery in places that no trail can be found on the ground.



Section of Butterfield Trail studied

Many efforts were made over the years to detail the Butterfield Overland Mail route through West Texas. The team of Roscoe and Margaret Conkling conducted the most famous, documented in their 1947 two-volume book, 'Butterfield Overland Mail' (Conkling). This route study is still considered today to be the most accurate and a sort of bible of the trail's route. However, during their research of West Texas they were unable to actually travel many sections of the trail and had to rely on local residents' memory of just where the trail ran. Often the memory of residents turned out to be close, but not absolutely accurate. This series of reports researched over a 15 year period attempts to clear up some of these gaps while taking a journey from Fort Chadbourne to the Pecos River and further to Fort Stockton on the Butterfield Trail.

Table of Contents

1.	Butterfield Overland Mail Overview	1
2.	Satellite Imagery Interpretation of Historic Trails	3
3.	The Butterfield Trail From Fort Chadbourne	5
4.	Archeological Investigations of Grape Creek Station (41CK305) Coke	County 8
5.	The North Conch River Butterfield Trail Crossing	33
6.	Archeological Investigations of Johnson's Station (41IR123) Irion County	36
7.	Middle Concho River Trail Split And Continuing West	71
8.	The Pecos River Horsehead Crossing	79
9.	Butterfield Overland Mail's Horsehead Crossing Station	84
10.	Horsehead Crossing To Fort Stockton	95

1. Butterfield Overland Mail Overview

The official government contract for the Butterfield Overland Mail began in September, 1858, running semiweekly from Tipton, Missouri, and Memphis, Tennessee, to San Francisco, California and the same in the opposite direction. However, the contract was acquired one year prior with a stipulation the mail would begin to run for the government within one year. That year was spent building roads, stations, bridges and everything else needed to complete the project (Butterfield Overland Mail –TSHA). Stages probably began running during that year, but it is unlikely they were carrying paying passengers. They may well have been running as part of the preparation and supplies for the formal opening in September 1858.

The Butterfield Overland Mail schedule called for stagecoaches to pass in each direction twice per week. The coach was fitted with three seats, and these were occupied by nine passengers. As the occupants of the front and middle seats faced each other, it was necessary for these six people to interlock their knees. About all the rest of the coach was full of mail bags (Butterfield Overland Mail - Smithsonian).

For the West Texas portion of the trip the wagons were more rugged than the eastern Concord coaches. They were built especially for Butterfield and were called Celerity Wagons or Mud Wagons due to their rugged construction.



Celerity Wagon or 'Mud Wagon' used by Butterfield Overland Mail Company (Photo Courtesy of the Booth Western Art Museum)

Another unique aspect of the West Texas portion of the route were the mules used to pull the wagons. They used semi-wild Spanish Mules. Spanish Mules were originally brought from Spain to Mexico. They were smaller than their larger cousins and the mules we are familiar with today. They were hardier in this rough and dry country.



Print of a 19th Century Spanish Cowboy riding his mule (Courtesy www.mulesspain.com)

The coaches would arrive at Fort Chadbourne Tuesdays and Fridays heading west and Wednesdays and Saturdays heading east. The entire trip took 25 days in one direction.

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1858 Butterfield Overland Mail Weekly Schedule (Smithsonian National Postal Museum)

2. Satellite Imagery Interpretation of Historic Trails

Satellite imagery is the new tool in the archeology tool set. This is now well known in the professional archeological community, but it is also available to amateur historians and archeologists. We need to keep pace with the technology as it continues to emerge and use it to its fullest in helping us reveal the past. I think that we will continue to find that with this new tool we will find some of the accepted theories will either be modified or more fully fleshed out, filling in what the military refers to as intelligence gaps. In this case we can call them historical gaps.

The advent of publicly accessible satellite imagery via Google Earth played a crucial role in finding and interpreting this particular site. First, it helped find it by being able to follow the Butterfield Trail, something previously unavailable through other means. Even after 161 years the trail trace is visible to the trained eye.

The reason an historic trail can be traced through satellite imagery is that satellite images can show slight differences in the vegetation caused by the years of constant use of the trail and then allowing the vegetation to grow back after the abandoning of the trail. The vegetation will generally grow back slightly different than the surround area due to the trail having become a depression which later attracts more soil and water runoff from rains. Bushes and grass tend to grow slightly healthier in the depressions. In most areas it can be so slight that casual observation on the ground or even from an aircraft cannot detect it. However, using satellite imagery, especially with multiple images of the same location using Google Earth's 'Historical Imagery' tool, a trained eye can find the trace of these vegetation changes in long wagon trail lines across the terrain. A good example of this is a spot just off Arden Road, outside of San Angelo. Standing on the spot where the trail is and looking directly down the trail, if you did not know it was an old trail you would take the difference in the terrain and vegetation as natural. However, you can see just a slightly better growth in the grass from the long ago depression.



Standing on Butterfield Trail looking north. Note the slight depression and tall grass.

Using satellite imagery from an extreme oblique angle, which is what Google Earth allows, can reveal the slight difference in a much more striking contrast and you can see the trail as it snakes across the countryside. However, another extremely important feature in Google Earth that is needed to follow the more difficult stretches of trail is the historical imagery capability. When looking at a location with the historical imagery capability set to on, you can move through the many years of images, looking at the exact same piece of earth from the exact same angle and find the one that will show the trace best for that piece of earth. I try to angle it out and go pretty far out so I get a long distance look. That is usually where I can see the faint trails best. The old trails tend to not follow existing boundaries or roads. When you see a faint trail crossing multiple properties, but in no logical relationship to modern boundaries it is a good bet is it an old trail. They always followed the easiest terrain possible - no steep cuts or hills. If they had to go down a cut they would always find the easiest way possible. You have to look at the trails from all different angles to pick them out piece by piece. Sometimes I go backward as if I'm looking out the back of an airplane and sometime I go forward as if I'm looking out the front. I've even followed the trail sideways. It all depends and it's a lot of trial and error. I connect the pieces together using the Google Earth line drawing tool to put a line down on top of it and then I begin with the next piece from the end of the line. Most of the time the trail is darker rather than lighter. Sometimes it looks like a bunch of bushes in a row and sometimes it is just some dark splotching that ends up looking like a faint line. The final trick is to be able to move the image forward and backward or side-to-side. For some reason, this allows your eyes to pick up the hard-to-find trace line where they could not in a still picture. I've found that the best elevation to be at is around 3,000 feet.

The following picture shows the trail as it heads to the North Concho River crossing point. Notice the slightly darker vegetation in a line highlighted by arrows.



Satellite image of Butterfield Trail as it heads north to Middle Concho River crossing (Google Earth)

3. The Butterfield Trail From Fort Chadbourne

In order to be sure you are on the Butterfield Trail you need to begin from a known point. In this case we know that Fort Chadbourne was a main stage stop for the Butterfield Overland Mail and we know exactly where the stage building is. With this we can start our journey, heading west.

According to Conkling, the stage headed from the stage stop "west for about a quarter mile to the crossing on Oak Creek where the stream may still be forded at normal flow." Conkling continued, "It then followed a winding course through the hills bordering the river." Finally, they state the trail crossed the Colorado River at the location of Buffalo Creek. The problem quickly encountered was that the most prominent trail out of the fort heads not west, but south to a very deep cut in the stream, crossed a small bridge, in which only the abutments remain, and continued due south in a generally straight line and crossed the river at a location other than Buffalo Creek. This road was confirmed by multiple map sources later produced by the military. After crossing the Colorado River it also heads to the Grape Creek Mail Station, also documented in military maps.

The road described by Conkling was much harder to trace, but I finally was able to find it and follow it exactly as described. Although undocumented, this means there were actually two different roads to the Colorado River used during different periods of time. The one described by Conkling was the road laid out by the military to move from their earlier location of Camp Johnston on the North Concho River. It follows a path through the existing cemetery and across the highway, turning to cross the creek, as he states. From that point it begins to fade as the trace heads south. Returning to Conkling's account about the Colorado River crossing, he states, "From this point it followed along the west side of Buffalo Creek for a distance of about four miles where it diverged from the old Military road which followed on southwest by way of Pecan Spring, while the Butterfield road from this junction to the Middle Concho River, was a newly opened company-built section of road."

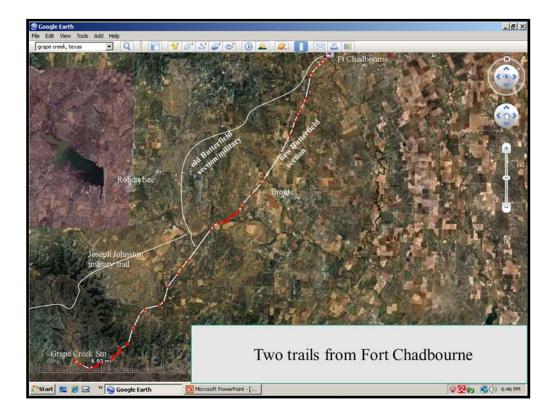
Note that he states that it was following a military road before diverging. This is significant. In old military maps this road was listed as the Joseph Johnston road. Later, a better and more direct road was built by the Butterfield Company down to the Colorado River. This one required a direct south exit from the fort and to do this they needed to build a bridge across Oak Creek, which is very deep at that point. Those bridge abutments are still there and you can trace the trail going up to them and leaving on the south side to head toward the west side of what is now the town of Bronte. After taking the more direct and easier route down to and across the Colorado River the newer road headed west to merge with the older road and continue on to the Grape Creek Station.

Below you can see where I have traced both trails heading south, where they cross the Colorado River and where they merge to continue heading south. The trail on the right is the older trail and on the left is the newer trail. There is one discrepancy in the Conkling account and that is that the trail only follows along the west side of Buffalo Creek for a short distance and then crosses to the east side. It had to cross at this point to continue south to the Grape Creek Station.



Two Colorado River points (looking south) and merge point (Google Earth)

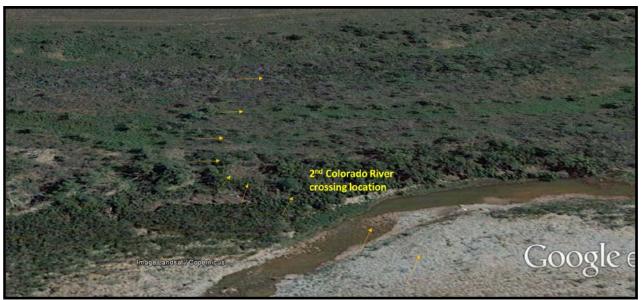
The Butterfield Company needed to take a different route in order to set up a stage stop at the proper distance with accessible water they had determined for changes of mule teams and apparently there were no good locations on the original military route. That stage stop was to be the Grape Creek Station. So the Butterfield route diverged from the military route just after crossing the river. The military route headed SSW and the Butterfield route headed SSE.



After abandoning the military trail the new trail passed to the west side of what is today the town of Bronte and crossed approximately 3.5 miles east of the original crossing.



Butterfield Trail as it passed by current town of Bronte (Google Earth)



Butterfield Trail at Colorado River crossing south of Bronte (Google Earth)

4. <u>Archeological Investigations of Grape Creek Station (41CK305) Coke</u> <u>County</u>

The Butterfield Overland Mail's Grape Creek Station was a smaller, mule-changing station in the Concho Valley prior to any habitation in the area. It was abandoned in 1861 due to the onset of the Civil War, but the former location was still known until the early 1900s. After that the memory of its location was lost as those with the knowledge passed on. The general location was known, but first-hand knowledge was lost. An attempt was made by Roscoe and Margaret Conkling in the late 1940s as they wrote their now famous 3-book set on the Butterfield Trail, but they were never able to actually locate the station site and had to rely on the landowner's description of the location. Over the years several groups of avocational archeologists and historians attempted to verify the described location as they hunted the local area, but to no avail. This studying used new satellite technology to find the actual location and straighten out the history of this small, but important site in the area.

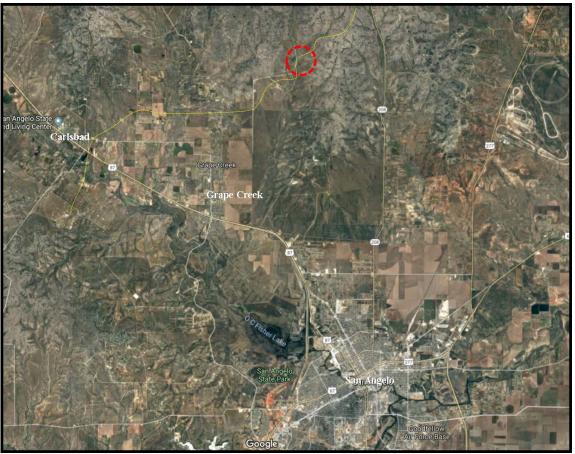
With the permission of the landowners the on-ground efforts began with metal detecting surveys of a narrowed down location. Very quickly the site was identified through the metal detecting and verification of the trail running to it and a more thorough survey project began in order to tie the archeological artifacts pulled from the ground to compare against the research and confirm the identification as the Grape Creek Station.



East Fork Grape Creek looking south

Grape Creek Station was the first relay station for the Butterfield Stage line heading west after leaving Fort Chadbourne, Texas. It was one in a series of stations for the stages crossing West Texas on the way to or from the Pecos River and New Mexico between 1857 and 1861. It was located on the east side of the east branch of Grape Creek, a spring fed creek running north to south. Travelers came to the station after a southerly crossing of 30 miles through the dry West Texas land and over a small set of hills given the name Stone Mountain at the time. Coming

from the west it was the next station after the Johnson's Station on the Middle Concho River, a distance of 32 miles. Although neither Fort Concho nor San Angelo existed at the time, the location sits just over 18 miles north of these current locations and 10 miles northeast of the current town of Grape Creek.



San Angelo and towns of Grape Creek and Carlsbad (Google maps)

This stage station site was bordered to its west by the east branch of Grape Creek, sitting in a valley running north and south one mile wide by four miles in length. It is in an active floodplain along the creek area with low hills to the east and west. Over the decades the site has seen may savage floods and fires, which is why the site had little to see on the surface of the station's occupation. The main area of interest is in an open field that was cleared of cedar and mesquite by the landowners who also never knew of the site at this location.

In the 1800s this area would have been open prairie. Elevation is 2,190 feet. Grape Creek lies approximately 200 feet west of the estimated location of the original main building. The site takes up just under a quarter acre.

We know a few things about the Grape Creek Station construction from first and second hand accounts of the period. The first account came from Mr. Waterman Ormsby, the first and only passenger of the inaugural run of the Butterfield Overland Mail (Wright). Ormsby was a special correspondent for the Tucson Arizona Herald and rode the entire route in September, 1858. His account of the station follows:



Waterman Ormsby (Wikipedia)

"We soon reached it and found it to be a corral, or yard, for the mules, and tents erected inside for the men, under charge of Mr. Henry Roylan. They had seen us coming and were herding the mules as we drove up. Their corral was built of upright rough timber, planted in the ground. They had pitched their tents inside, for fear of the Indians, and took turns standing guard, two hours on and two hours off. The station was near Grape Creek, a fine stream, and also near some fine timber -- two desirable things not to be found everywhere in Texas."

Later, a cabin was built outside the corral and the two were enclosed by a wooden picket stockade wall. We know this from an account by Mrs. Emma Elkins she gave in a 1911 article of Hunters Magazine (Elkins). Mrs. Elkins lived on Fort Chadbourne at the time of an Indian attack and her account came from the Grape Creek station occupants themselves while Mr. Pennington, the station manager, was recovering in the Fort Chadbourne hospital.

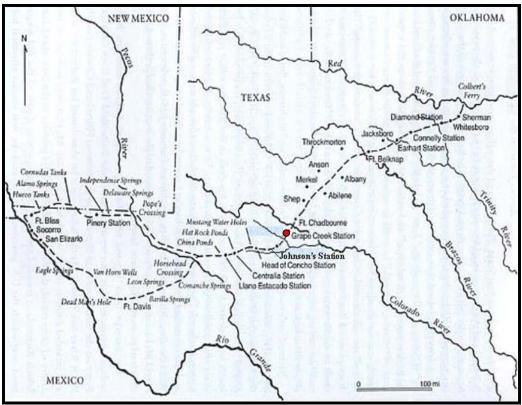
"One fusillade after another was fired at the house without serious results, the house being built of split logs and therefore bullet-proof, and the premises enclosed by a picket fence five feet high."

Unrelated to the Indian attack the next day was to be the closing and abandoning of the station. The company had given orders to close everything down due to the onset of the Civil War and at the time of the attack they were already packed to leave. The military escorted them back to Fort Chadbourne after the attack for Mr. Pennington's recovery and afterward they moved back to their home in Mason, Texas.

Grape Creek Station Post Butterfield Stage Period

After the stage station was abandoned in 1861 this was still the main road for all travelers from east to west through north Texas to New Mexico. Up to the late 1800s this road was used by immigrants heading west, cattle drives, military, ranchers and freighters, crossing into Texas from what is now Oklahoma at Collier's Ferry in the area of Whitesboro. Similar to Johnson's Station - the abandoned stage station on the Middle Concho River - the "old" Grape Creek Station became a popular camping spot for travelers headed in either direction. The reason for

this was fairly obvious once you see the location. If you are heading west you would have just come over a rough set of hills and about an 8-hour day's travel from Fort Chadbourne. If you were heading north from either the old Johnson's Station or in later times, Fort Concho, you would again have just completed an 8-hour day and would be facing the hills as your next obstacle. The archeological artifacts recovered from the site support this postulation of this continuing to be a preferred camp site.



Butterfield Trail through West Texas

Grape Creek Station Ranch Period

The ranching period for this area began in 1899 when John Abe March and his brother, Napoleon Murph March, purchased 30,000 acres from B.M. Collyns. Collyns purchased the land from the state of Texas in 1880 according to Coke County records.

There is no indication from either the evidence or family history that this site was ever occupied by either the March brothers or B.M. Collyns. The March brothers knew of the site and tried to describe it to Roscoe Conkling during his visit in the late 1940s, but they never actually took Conkling to the site. There was some confusion by either the conveyance of the site location or Conkling notes because the site location, as described, was misidentified in Conkling's subsequent book. It was a minor error of compass direction from the March home, but critical in the station's true location. This was confirmed by the fact that an archeology group from Odessa, TX searched for the site as describe in the Conkling book around the year 2,000, but after extensive searching their efforts turned up nothing. Determining the exact trace of the trail was incorporated into the research in order to properly correlate the data of the satellite imagery with accounts by stage passengers or any persons with first-hand knowledge. The final piece is to actually obtain access to property to confirm both the trail and the site and work it as an archeological project to lay the final piece of the puzzle in place.

Comparing First-Hand Accounts with Satellite Imagery To Find The Location

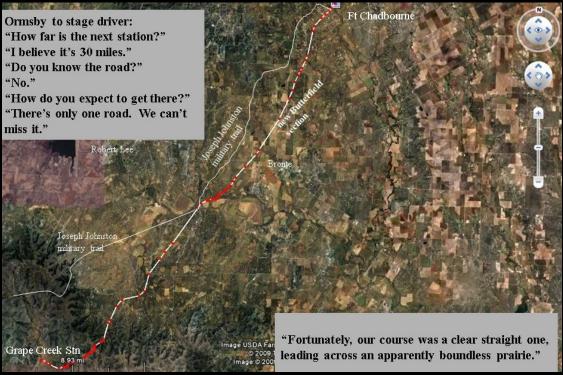
The first account that needed to be correlated to imagery interpretation of the trail leading to the station was that of Ormsby and his portion of the trip from Fort Chadbourne to Grape Creek. In his account he asked the driver how far it was to the next stage stop.

"How far is the next station?" "I believe it's 30 miles." "Do you know the road?" "No." "How do you expect to get there?" "There's only one road. We can't miss it."

There are actually two wagon trails leading out of Fort Chadbourne. The earlier road was a military road used to transfer the military from the previous encampment, named Camp Johnston, to Fort Chadbourne in 1853. A portion of this road has long been believed to be the same road as the Butterfield Trail. However in 2010 I discovered the Butterfield Trail actually took a more direct route from Fort Chadbourne south to the Colorado River. This route to Grape Creek station measures exactly 30.2 miles, while the older military route to the Colorado River and then to Grape Creek Station is 31.5 miles.

Additionally, the older military routes winds its way through some fairly rugged country on its way to the Colorado River, whereas the other route almost parallels the current Highway 277 over a flat prairie. Again, going back to Ormsby's account:

"Fortunately, our course was a clear straight one, leading across an apparently boundless prairie."



Trail trace to Grape Creek Station (Google Earth)

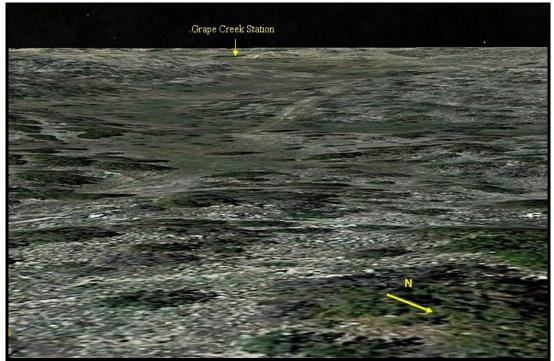
The trail must cross a rugged set of hills that run northwest to southeast to get over to the valley Grape Creek runs through. The route leading up to this set of hills and the road climbing up the east side is well known. The east side is named Butterfield Canyon and the road is cut through the tough limestone. It is fairly steep getting up. According to Ormsby, because they had to do with just two mules instead of four the mules stopped halfway up and refused to go any further. So, the spent the night to let the mules rest and made it to the top in the very early morning hours while it was still dark. When they reached the top he continues:

"We ascended the hill and discovered the station fire, miles distant – a mere speck among the trees."

Again, going back to Google Earth and taking the view he was describing you find the only possible location he might have been able to see the station fire would have been down a draw looking west with a very narrow view between the lower hills. That draw is named Butterfield Draw on all topographic maps.

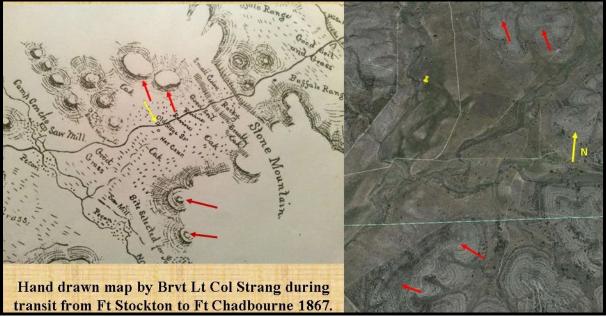


Looking down on Grape Creek Station from top of hills (Google Earth)

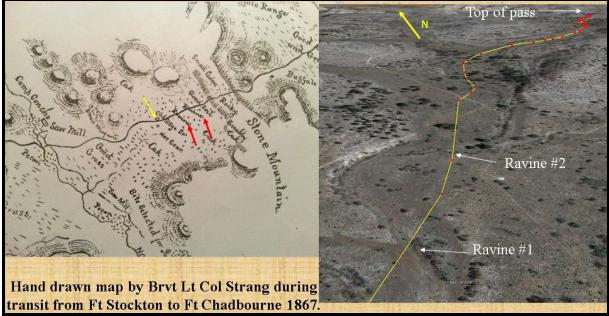


Looking down on Grape Creek Station from top of hills at lower altitude (Google Earth) (Note that there is only a small viewing window through lower hills)

The next account comes in the form of a map. In 1867 Brevet Lieutenant Colonel Strang made a journey from Fort Stockton to Fort Chadbourne to assist in preparations of the transfer of the military from Fort Chadbourne to the new Fort Concho. He made an extremely precise map of his journey, which included the "old Stage St" on it. By comparing the map against Google Earth imagery there are several items that match up to the current location. The first is the station in relation to a set of hills to both the north and south. Setting the two side by side makes a perfect match. The second is his description of two ravines they crossed after leaving the station location and heading up the hills as they continued east and north to Fort Chadbourne. Again, it is a perfect match.

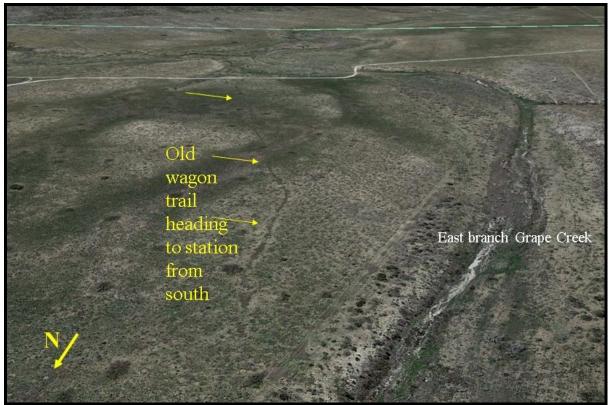


(Google Earth on right)



(Google Earth on right)

That brings us to the trail itself, which can still be seen in satellite imagery. After crossing the creek coming up from the south the trail is quite prominent as it makes its way north up the creek.



Butterfield Trail trace coming from south up Grape Creek (Google Earth)

At one point the trail takes a 90 degree turn to head east up Butterfield Draw and up the hills. There is only one reason it would take such a sharp turn from the creek and that would be that the station has to be somewhere near the turn. This revealed the proper search location which ultimately lead to the finding of the site on the ground.



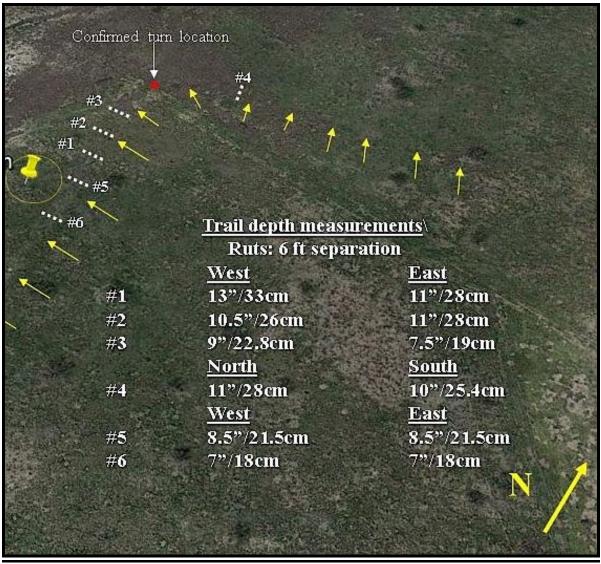
Butterfield Trail trace 90 degree turn to east (verified by walking the depression)

The trail throughout the Grape Creek area left a fairly deep depression in the soft soil. We would have to drive across the trail each day to get to the site and the vehicle sensors in the front bumper would be set off each time as we dipped down into the depression, which averaged seven feet wide and 9.5 inches below the rest of the terrain. At the point we drove through it was 11 - 13 inches deep.



Depth of the trail depression is quite prominent (Front wheels in middle of trail)

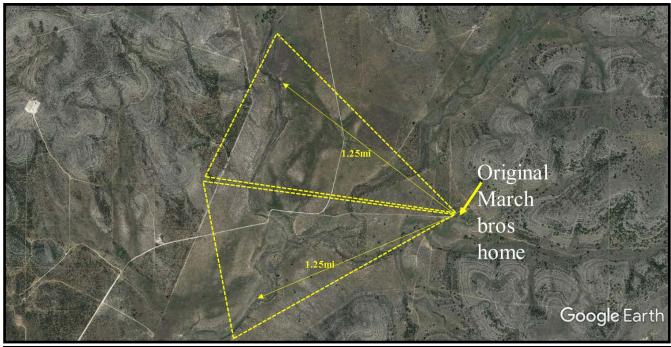
In order to confirm the imagery interpretation we walked the trail and made extensive measurements. The depression left in the ground is quite obvious in this area, to the point that we could determine the ruts within the depression. We measured these rut area depths compared to the surrounding terrain. We additionally confirmed the locations of where the trail crossed the ranch roads heading both north and south.



Trail depth measurements (Google Earth)

The final piece to the puzzle and the answer to why so many who searched for the site previously could not find the station location is again based on the Conkling description of the location as recorded from their discussions with the March family during their travels through the area.

According to Conkling's notes the location was **"approximately one mile and a quarter** <u>southwest</u> of March brothers ranch headquarters." Whether the notes were originally written down wrong or the notes were copied incorrectly when being prepared for their publication, it appears the compass description was incorrectly entered and everyone searching previously were looking in the wrong location. The site was exactly one mile and a quarter from the original March ranch house, but it was <u>northwest</u> instead of southwest.



Grape Creek Station in relation to original March ranch (Google Earth)

Grape Creek Station Archeological Investigation

Butterfield Overland Mail Period

Next to the trail and about 100 yards before the 90 degree turn a very faint outline can be seen in the one particular satellite image of a circular corral. The circle is approximately 70 feet in diameter. Within that circle we got our first metal detecting hits. Both from the imagery and the layout of the artifacts this appears to have been a 20 X 15 foot shed within the corral, probably a supply and tack shed. The items found were square nails for construction of the shed, various pieces of metal band, metal tops of containers, small crushed cans, heavy gauge wire, and a piece of heavier gauge metal with a hand-punched hole in it



Tack/supply shed location and artifacts

Just outside the area we found a hand-forged Spanish Mule shoe. The mule shoe appears to have been removed due to wear rather than arbitrarily lost. There were no nails in the shoe and it had distinct wear and a crack in the middle of the worn area. This shoe is the exact same size as the mule shoe found during excavations of the Butterfield Station at Fort Chadbourne in 2008. (Reimenschnieder)



Hand-forged Spanish Mule shoe with crack and heavy wear

Spread around the corral area on the surface we found various pieces of bottle glass. Normally, finding glass bottle fragments in a corral would be unusual. However, Ormsby's account tells us that the station residents were living inside the corral in tents on the inaugural journey. They probably lived in there for quite a bit longer as they built the new cabin.

Their corral was built of upright rough timber, planted in the ground. They had pitched their tents inside, for fear of the Indians, and took turns standing guard, two hours on and two hours off.

Later, a log cabin was built outside the corral and the entire area enclosed with a five foot high picket stockade wall. We know this from an account of Mrs. Emma Johnson Elkins in a 1911 Hunter's Magazine, published out of Ozona, TX. Mrs. Elkins lived on Fort Chadbourne at the time and this was an account of an Indian attack on the station that took place the day before they were to abandon the station from orders of the company. The route was being shut down due to the start of the Civil War. Although the Indian attack received attention in several publications afterward, the pertinent portion of her account follows.

One fusillade after another was fired at the house without serious results, the house being built of split logs and therefore bullet-proof, and the premises enclosed by a picket fence five feet high.

The first indication of where the cabin resided is based on the great number of cut footing stones strewn about a fairly small area, with many smaller cut stones of the same type.



Sampling of footing stones throughout cabin area

Similar to the vegetation being changed for the trail, the vegetation that grows back after a building has blocked out the sunlight for many years is also different than the surrounding vegetation. This cannot be seen by satellite imagery, but it can be seen by drone imagery and in this case it very clearly showed the right angles making up a three-room L-shaped dog trot cabin next to the corral. All together 42 large size stones were found on the surface in the area of the cabin. Some of these were exposed during metal detecting digs. Smaller size stones, also flat on both sides, were too numerous to count. Note the breezeway of the dog trot breezeway is facing the optimum direction for the predominate wind from the southwest. This is the same layout for the dog trot cabin found at Johnson's Station, the next station down the line to the west.

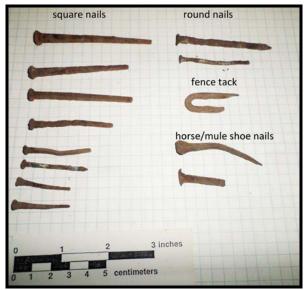


Drone imagery showing cabin area with footing stones

In and around the cabin area we found hundreds of metal detection hits. Most turned out to be square nails of all sizes and flagging these locations confirmed the outline of the building as seen in the vegetation from above. The smaller nails were probably used mostly for nailing down hand-cut shakes for the roof, which would explain the larger number found throughout. It can be speculated that the larger nails were for the main roof beams and probably the door and window frames since a split log cabin would not require much in the way of nails for the walls.

A few of the smaller nails turned out to be round. This was at first a puzzle, given the probable period of the construction. Our research, though, indicates round nails were being manufactured much earlier than previously thought. Several companies began producing round nails (called wire nails at the time) in New York in the early 1850s (Nelson).

The mule shoe nail below is one of the two we found outside the corral area and near the estimated cabin perimeter. These are mule shoe nails and fit the mule shoe we found perfectly. Additionally, these two nails were cut, one at 28mm and the other at 27mm. There is a slight bend on the end of each nail was cut with nail cutters. It is important to note that the nails are in the same condition as when the shoe was put on. This indicates they were removed by a farrier with the removal of the shoe. Although it is possible this was done by someone traveling at a later time, it is much more likely this was part of the standard activity by the station mule tenders while the stage was running.



Sample of the many nails found at this site

It is notable that no window glass was ever found at this site. That fits with not only the period, but the fact this cabin was not intended as a homestead site.

The 44-40 was one of three cartridges of this type found at various locations of the site. It is likely this cartridge was buried deeply during the grubbing operation that went on while clearing the field on two separate occasions according to the landowners. This would be an artifact from the post abandonment/camping period.

The large amount of mortar/plaster found in the shovel tests and throughout all the digging in the cabin area is also significant. There is a great deal of it coming out of almost every dug hole in the area of the cabin. The term mortar/plaster is due to the fact this is not mortar in the traditional sense or of the kind normally found, for example at Fort Chadbourne. Some unearthed stones were covered in the mortar/plaster substance, along with a slice of pure mortar coming out of the one hole.

It is likely these stones were used to build the fireplaces; one on each end was typical. The smaller stones, which are all also flat on both sides, were mortared/plastered as they were placed. Most were not exposed to high heat, but we did find fire cracked limestone spread about farther out from the cabin area. At first we thought this might be remnants of Middle Archaic Indian encampments since there was abundant evidence of stone tools and a few diagnostic points throughout the area. However we did find one very large cut limestone block that was fired and had mortar/plaster on it. This was probably one of the main fireplace blocks and this gave a strong indication that the smaller fire cracked rocks were also part of the inner fireplace construct and had been spread from the ranch clearing operations. The smaller stones were probably the outer portion of the fireplace that was not exposed to the high heat.



Mortar/plaster on stone, slice of mortar/plaster and various chunks



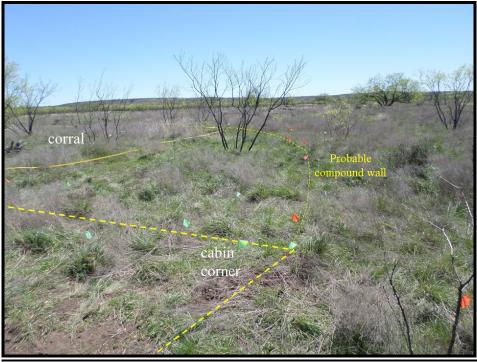
Large cut, fire heated limestone block



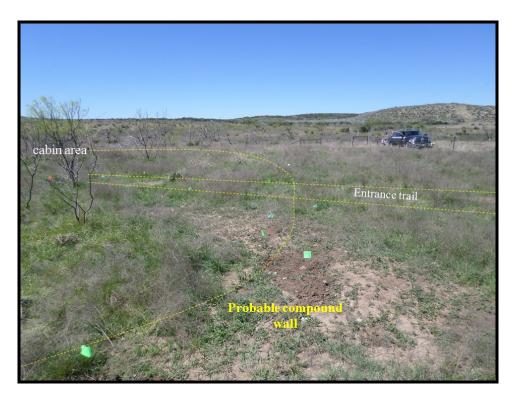
Mortar on side and top of large limestone block

As reported by Mrs. Elkin in her account, after the cabin was built a stockade type wall was added using a picket wall construct. A faint outline of this wall and the entrance trail from the

main trail can be seen in one particular satellite image. The entrance trail leads up to the cabin. It appears they extended from the corral to the cabin on each side for the stockade in a circular fashion. Flagged of the nails metal detected tend to support this outline seen in the imagery.



Probable south compound wall shown by flagged nail areas



Probable north compound wall shown by flagged nail areas



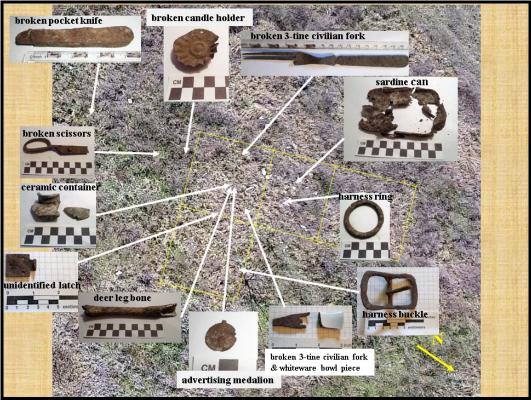
Outline of entire stage stop with stockade wall (Google Earth)

Grape Creek Station Artifacts

Similar to Johnson's Station, the next station down the line, there are multiple periods represented in the artifacts found at this location. There are the artifacts that would fit the period the stagecoach was active and there is the post stage station period, which represents camping for those using the old stage road.

The artifacts that fit the stagecoach period are limited. This is because the owners were ordered to pack up and leave the station in the spring of 1861. Within their account of the Indian attack conveyed by Mrs. Elkins they commented that their wagon was packed and they were to depart the next morning. After the attack a contingent from Fort Chadbourne was brought back to the station to render medical aid and assist in transporting them back to the fort. So, we know they departed and took all their possessions with them. The only artifacts left to find are those they purposely discarded as trash.

The numerous square nails used in construction of the cabin were obviously of proper period. Beyond that, most of the items of proper period were found in or very close to the estimated cabin perimeter. The following shows the artifacts and where they were found.



Artifacts in and around cabin area of probable Butterfield stage period

Also found in an area just in front of the building perimeter were some large pieces of whiteware. One was an identifiable piece of dish and the other had a partial stoneware stamp on it. The makers mark is from L.F. Field, Utica, N.Y., produced 1860 – 1870 (Pottery Magic).



Whiteware dish pieces and partial stoneware stamp

In addition to the hand-forged mule shoe found near the corral, three items in particular appear to be mule harness hardware. Those are the harness buckle, harness ring and a hand forged square

head hinge pin for the mule yoke. The buckle and ring were both found within the cabin perimeter. The hinge pin was found out by the area that would have been the stockade gate for the wagon to enter. The hinge pin is smaller than most mule yoke hinge pins. This can be explained by the smaller size of the Spanish mules being used for this portion of the stage route.



Mule harness hardware (artifacts top, examples bottom)

Post Stage Station Period Artifacts

After the stagecoach site was abandoned it continued to be used by travelers. Some of the items found were obviously from this later period. None of them point to any permanent habitation. One of the things we did not find is just as important as the things we did find. That is, we did not find window pane glass. This supports the proposition that this was never a later period home structure. One of the things people usually would do when trying to homestead would be to add windows. This was not that case at this location.

Two military periods of camping were found – Fort Chadbourne and Fort Concho periods. A 50-70 cartridge was found that matched a similar cartridge found at Johnson's Station on the Middle Concho River in 2006. This was a Berdan-primed, raised-ring center fire cartridge. This is also identified as UMC Ringed Folded Head. This was the earliest of the .50-70 Government cartridges. It was a black powder round adopted in 1866 for the US Springfield Model 1866 Trapdoor Rifle.



50-70 Military cartridge

There are two possibilities for this type cartridge being at these two locations. One is a unit from Fort Chadbourne and one is a unit from Fort Stockton.

In June 1867 Lieutenant Boehm left Fort Chadbourne with a detachment of 40 men and followed the Butterfield Trail down to the Middle Concho. They set up what they called 'Permanent Camp' at the location of Johnson's Station. Basing out of this location they escorted cattle herds to the Pecos for a period of one month, at which time they were relieved by G Company of the 4th U.S. Cavalry. This rotation of company size detachments continued for six months into November 1867, when Fort Chadbourne finally closed and moved to start up Fort Concho the following month. (Haley, Taylor)

The other possibility is the unit from Fort Stockton led by Brevet Lieutenant Colonel Strang on his march to Fort Chadbourne in October 1867. Both these units probably camped at the Grape Creek site, as it is approximately eight 8 hours by wagon between this site and the next stage site, Johnson's Station. It should be noted that a similar cartridge was found at the Johnson's Station site.

The other military artifacts found at this site come from the Fort Concho period. A broken knife and fork from an M1874 military mess kit was found at two separate locations within the estimated compound walls but not within the estimated building perimeter.



Utensils from M1874 mess kit

This site did not show up in any Fort Concho patrol reports. However, this site was known to be a temporary camp for soldiers from Fort Concho passing this way. It is unknown how long this building was standing and useable. It could have eventually been washed away by some of the massive floods reported in the early 1900s or the logs could have been taken away and repurposed.

Other camping items found appear to be civilian in nature. We know this road was used extensively after the Civil War by immigrant wagon trains and cattle drives. For the trail drives the name changed to become the Goodnight-Loving Trail.

The 44-40 was the most popular cartridge of the 1870s. Three were found at this location and six were previously found at Johnson's Station. These particular ones were stamped Winchester (WRC). In one cartridge the primer is missing, but from the other two it appears they were not fired from the same gun based on the hammer pin indentation comparison.

Except for one 44-40 cartridge the camping items appeared to be outside the building perimeter and spread around. In addition to the 44-40 cartridge a UMC 12 gauge 'Club' shotgun shell was dug up in the area of the cabin perimeter. The UMC Club double ring was the first in the Club family of shells. It was a black powder shell and is the first generation of Club shells. It was produced between 1885 and 1).



44-40 cartridges

One of the three medicine bottle tops found matches one of the most common Sarsaparilla bottles manufactured and most likely dates between late 1890s to early 1900s. (Lindsey) A second does not appear to be hand blown, making it probably the same general era as the Sarsaparilla bottle. A third could not be unidentified.



Medicine bottle tops (left bottle is Sarsaparilla)

A Dutch oven lid was found in an area that would considered completely outside the compound. Dutch ovens were the main cooking mode for wagon trains and cattle drives.

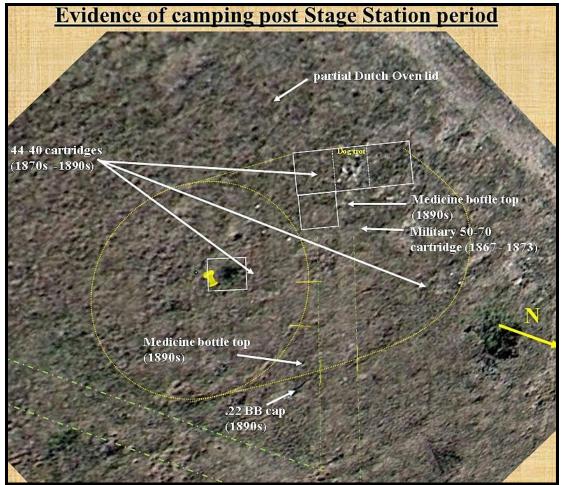


11 inch Dutch oven lid

Closer to the creek we found a solder top can lid. These were common in the 1870 to 1890s, often with military units. However, it could also have been any camping person of that time period. The lid was cut off below the seal.



Solder top can lid



Locations of probable camping artifacts (Google Earth)

Summary Of Findings For Grape Creek Station

The Butterfield Overland Mail's Grape Creek Station was located exactly where it was described by those with first-hand knowledge. And it was also constructed exactly as described. Time, floods, fires and modern ranching had almost removed all trace of it. Only a close inspection using new technology and following clues from our long ago travelers could help find this elusive ghost of the past. To the casual eye there is nothing left and there hasn't been for a long time. The owner stated she had ridden up and down this creek as a young girl and had never known of or seen this site.

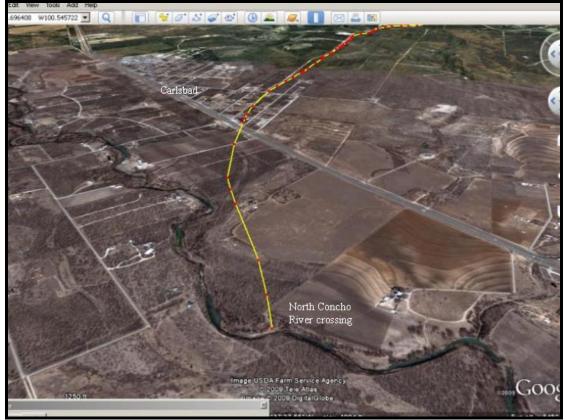
Although this primitive station only stood for a little over three years, it had a profound effect on the opening of the West and tying together our country across vast distances of a harsh and unforgiving land. Only the hardiest could build something out of nothing while withstanding everything nature and a hostile Indian nation could throw at them.

For the weary travelers it was a small spot where they could find peace and respite, sitting on the banks of a clear, spring-fed creek under the shade of lingering pecan trees. I'm sure many who came to this spot in covered wagons after the station was abandoned stayed more than just one day, knowing the next part of their journey would be unforgiving.

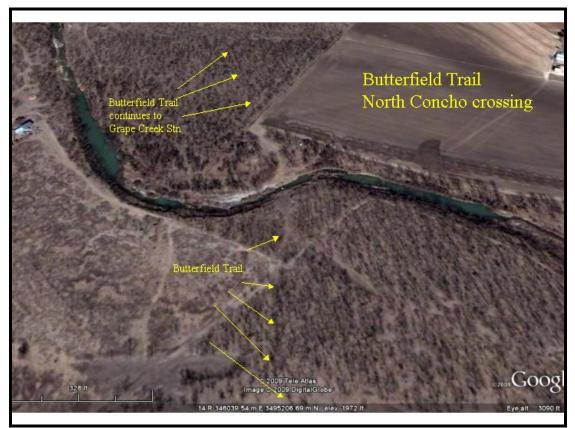
The location has been lost for the better part of 70 years and it was important to find it and pull from the ground what small bits of the past we could. We can now let the past go back to sleep and let the land continue on its path of reclaiming what it owns and what we only borrow and then return.

5. The North Conch River Butterfield Trail Crossing

After leaving the Grape Creek station the trail led down to the North Concho River through what is now the town of Carlsbad. This information is fairly well documented and the trace validated the reported route. Where the information differed from the trace as seen by satellite was the actual crossing site. According the Conkling the original crossing was, "where the ruins of the first concrete bridge over the river may be seen." There is no doubt there was a crossing at that location, but it was not for the Butterfield Trail. He mentioned two other crossings that were also not for the Butterfield Trail. The actual trail crossing was 1.2 miles southwest of the town of Carlsbad, close to where Mule Creek empties into the North Concho. This crossing is verified by continuing to follow the trail south of the crossing as it leads on down to the Middle Concho River and eventually to the next station, Johnson's Station.



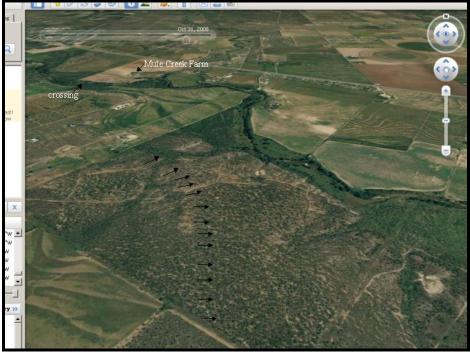
Satellite image of Butterfield Trail trace as it comes down through Carlsbad (Google Earth)



North Concho crossing of Butterfield Trail (Google Earth)

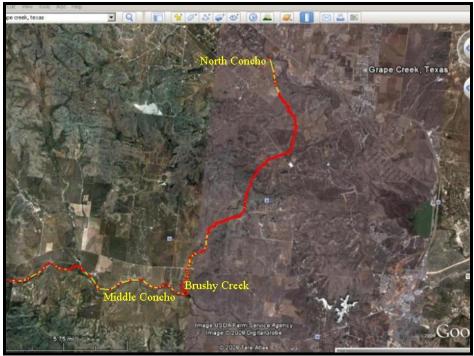


Old cut in bank on south side of North Concho River crossing



Trail heading south from North Concho River crossing (Google Earth)

From the North Concho the trail ran through the dry country down to the Middle Concho River. Again, Conkling made an educated guess on just where the trail came down to meet the Middle Concho, stating it was a "short distance east of the site of the old Arden post office." It actually crossed Arden Road, following alongside Brushy Creek down to the river. As the trail continued down the Middle Concho River it came to Johnson's Station.

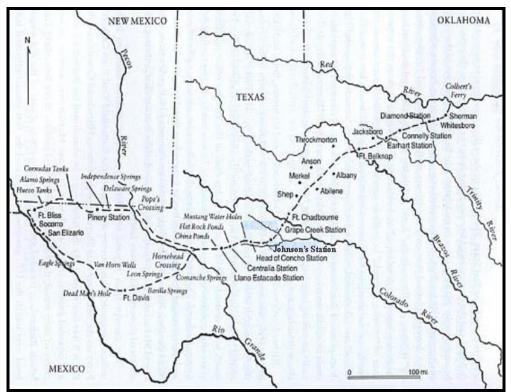


Entire trace of Butterfield Trail as it comes from North Concho and continues down Middle Concho River (Google Earth)

6. <u>Archeological Investigations of Johnson's Station (41IR123) Irion</u> <u>County</u>

Although there have been numerous references to Johnsons's Station by historians of the Butterfield Trail and Fort Concho, the location slipped away in history. Research of publicly available maps and publications gave a generalized area to begin searching. High-resolution satellite imagery newly available to the public helped narrow down the probable location by following the trail trace. The landowner was contacted and agreed to a survey to be conducted. On our first survey an unknown historic site was found with white-ware pieces, metal and many stones scattered around that looked to have been used in construction of some portion of a building. Additionally a brush pile nearby had larger stones that were fired as if they might have been used for a fireplace or hearth. When this information was presented to the landowner, whose family had owned the property since the late 1800s, he indicated there was no known site at that location. Thus began an extensive survey, which eventually uncovered a much more extensive site of Johnson's Station.

Johnson's Station was the second relay station for the Butterfield Stage line heading west after leaving Fort Chadbourne, Texas. It was one in a series of stations for the stages crossing West Texas on the way to or from the Pecos River and New Mexico between 1857 and 1861. It was located on the Middle Concho River after a southwesterly crossing of 32 miles through the dry West Texas land from the previous Grape Creek Station. Coming from the west it was the next station after the Head of the Concho station. Although neither Fort Concho nor San Angelo existed at the time, the location resides just over 20 miles west of these current locations.



Butterfield Overland Mail route

This entire area covers approximately five acres. It is bordered on the eastern side by a shallow draw, on the northern side by a slight rise and open ranch land, on the southeastern side by a 25-foot deep draw, and on the south side by a large area of pecan and oak trees. It is in an active floodplain with low hills to the north and south. The main area of interest and the western and northern areas are open field that was cleared of cedar and mesquite by the landowner and pushed into brush piles. In the 1800s this area would have been open prairie. Elevation is 2,050 feet. The Middle Concho River lies approximately 700 feet south of the main building area and 300 feet south of a former second building area.

There is much confusion throughout the history books and articles over the years about this small station west of San Angelo. Many historians confused this station with Camp Johnston on the North Concho River. Camp Johnston was never a stage station. It was the military camp that preceded Fort Chadbourne. Some have also confused the name as Johnston's Station. This is based on the same confusion, but mixes names from each location. First hand reports of the time represent the name as Johnson's Station or Johnson Station. Finally, some confuse the Middle Concho Johnson's Station with another Johnson's Station located in Tarrant County, just south of present day Arlington, Texas, located between Dallas and Fort Worth. That Johnson's Station had its own special piece of Texas history, first as a Texas Ranger outpost and later as a frontier community with one of the first post offices in Texas.

Johnson's Station Butterfield Stage Period

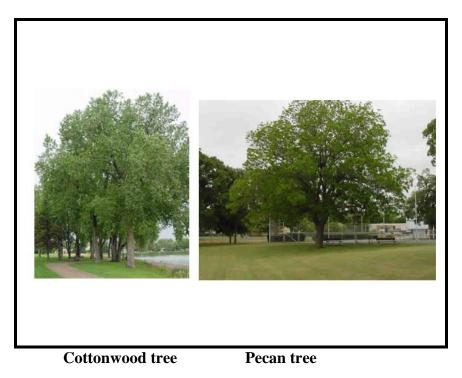
It was a Friday afternoon in March 1857 at Johnson's Station on the Middle Concho River and the stage was due anytime. Johnson's Station was a small line station, just enough for a quick meal and change of mules. Mr. and Mrs. Evaness ran it with five other hands. Suddenly a large group of Comanche appeared out of nowhere. The Indians tried stealing the mules but they were hobbled with chains and locks so they killed them. Then they turned their attention to the station. The men and one woman barricaded themselves into one side of a double log cabin separated by a 10-foot breezeway called a dog trot. The Indians looted one cabin side that was not barricaded, which included the kitchen. However, they were not satisfied and began using flaming arrows onto the roof to force the occupants out of the barricaded side. The station workers yelled out in Spanish that they were well armed, but would not fire on the Indians if they let them go. The Indians agreed, but when Mrs. Evaness emerged one of the Indians said in English that the white woman was beautiful and he wanted her for his own. Mr. Evaness heard the comment and killed the Indian on the spot. The employees ran for cover in a grove of trees with the Indians firing on them. Mr. and Mrs. Evaness were wounded and things were not looking good. Just at that time the stagecoach appeared on the road. Thinking the coach might be bringing troops from Fort Chadbourne the Indians quickly departed. (Wilbarger)

Such was the life on the Butterfield Stage route from 1857 to 1861. Although the larger stations such as Fort Chadbourne were what folks saw on the route schedules, the fact was they needed stations spaced approximately 30 miles apart to relieve the mule teams. After Fort Chadbourne the travelers first came to the Grape Creek Station and next Johnson's Station.

Another account in October 1859 by a traveler went like this.

"Our spirited little landlady, reared in eastern Texas, gave us a description of an attack on the station by one hundred twenty Comanche who were held off by the stock tender, her husband and herself three weeks before." The lady declared, "We won't be driven out by worthless red-skins."

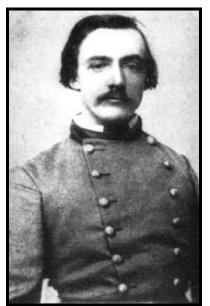
The traveler also noted iron-pointed arrows, with feathers, were still sticking in the cottonwood log fence that surrounded the station. (Haley, Green) The reference to cottonwood logs was probably a misidentification of the Pecan trees by someone unfamiliar to the area.



The Butterfield Overland Mail schedule called for stagecoaches to pass in each direction twice per week. For Johnson's Station the coaches would arrive Tuesdays and Fridays heading west and Wednesdays and Saturdays heading east. The entire trip took 25 days in one direction.

Adam Rankin Johnson

Adam Rankin Johnson acted as county surveyor and as an agent for the Butterfield Overland Mail as far west as El Paso and also became a stage driver for the company. Although he did not purchase the land for Johnson's Station he did purchase several other sections of land along the Middle Concho River. It was likely Johnson that first chose the location for the mail station, probably owing to the name Johnson's Station. When the Civil War broke out Johnson joined the Partisan Rangers of the Confederate States Army, later reaching the rank of Brigadier General. After the Civil War Johnson founded the town of Marble Falls, Texas



Adam Rankin "Stovepipe" Johnson

Some researchers speculated that the station moved shortly after its initial service with the Butterfield Overland Mail, but no records support this theory. Logic also dictates that this small group had neither the time nor the security to build an entirely new station while at the same time keeping their stock tended and maintaining the station schedule. The Middle Concho Johnson's Station probably served the Butterfield (later Wells Fargo) mail and stage route until the line was shut down in 1861 due to the onset of the Civil War. However, the historians weren't completely wrong. Johnson's Station probably did move up river in a later period, after the Civil War.

Ben Ficklin Mail Station (Johnson's Station #2)

The move of Johnson's Station took place when the Ben Ficklin (San Antonio To El Paso) mail route started up after the Civil War in 1868, connecting into the old Butterfield Trail after leaving Fort Concho (San Angelo). The stage would leave the Ben Ficklin stage station a few miles south of Fort Concho and drive to the fort to pick up passengers and mail before heading west to follow the old Butterfield Trail to the Pecos River and on to El Paso. The original Johnson's Station was located at the best location possible within the maximum range set for the mules to be relieved for the Butterfield route coming from the north. In this case it was 32 miles from the Grape Creek Station. The next stop after Johnson's Station was Head of the Concho Station, a distance of 32 miles again. When the Ben Ficklin line began they must have realized the first stop was too short from Fort Concho – only 22 miles. So they moved it farther up river to even out the spacing between stations to 27 miles apart. They decided to keep the same name and also called this second stage station Johnson's Station. Land deeds support this new location's successive ownership by various partners of the Ben Ficklin stage line. A detailed satellite imagery search of the later station and the 'Grierson shortcut' portion of that road revealed the likely location of this station at the proper distance from Fort Concho and indicated on the land deeds. The Grierson shortcut was ordered by the commander of Fort Concho and ran "from Johnson's Station." (Temple) The Grierson cutoff begins on the east side three miles from the original Johnson's Station, bypasses it heading west and then another five miles to the second Johnson's Station.

US Cavalry, Fort Chadbourne

During the same general time frame that the Ben Ficklin line was getting started the original Johnson's Station probably served as a military camp by units from Fort Chadbourne. In June 1867 Lieutenant Boehm left Fort Chadbourne with a detachment of 40 men and followed the Butterfield Trail down to the Middle Concho. They set up what they called 'Permanent Camp' listed as 18 miles from the junction of the Middle and North Concho Rivers. This is the location of the original Johnson's Station measured by the trail running along the Middle Concho River to the junction of the two rivers. Basing out of this location they escorted cattle herds to the Pecos River for a deployment period of one month, at which time they were relieved by G Company of the 4th U.S. Cavalry. This rotation of company size detachments continued for six months into November 1867, when Fort Chadbourne finally closed and moved to start up Fort Concho the following month. (Haley, Taylor)

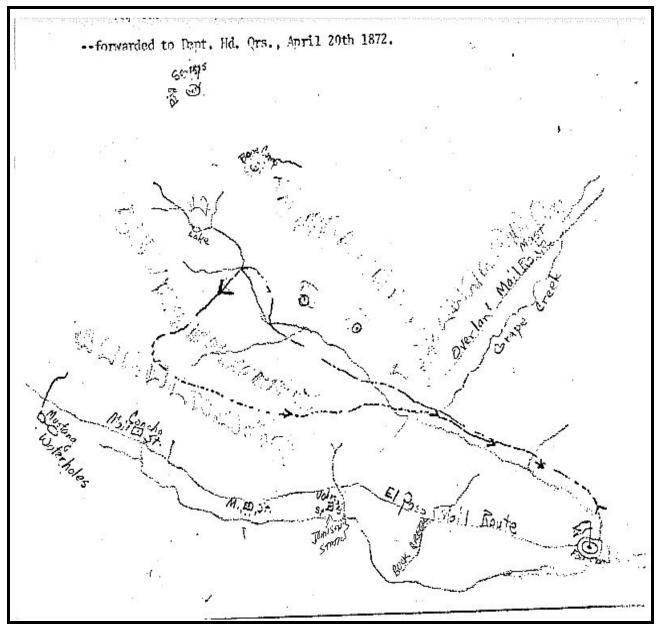
US Cavalry, Fort Concho

After Fort Concho was established the troops again took up the responsibility of protecting the Ben Ficklin mail line and escorting cattle drives. In June 1869 soldiers began permanent picket duty at the new Johnson's Station #2, set up by the Ben Ficklin line. In December the commander of the Pecos Region instructed the Fort Concho commander to build permanent quarters at the station – a building with a pole roof covered with mud or unformed adobe that could overlook the corral. The picket outpost consisted of one noncommissioned officer and four privates. These were detailed from the infantry companies at Fort Concho. (Concho)

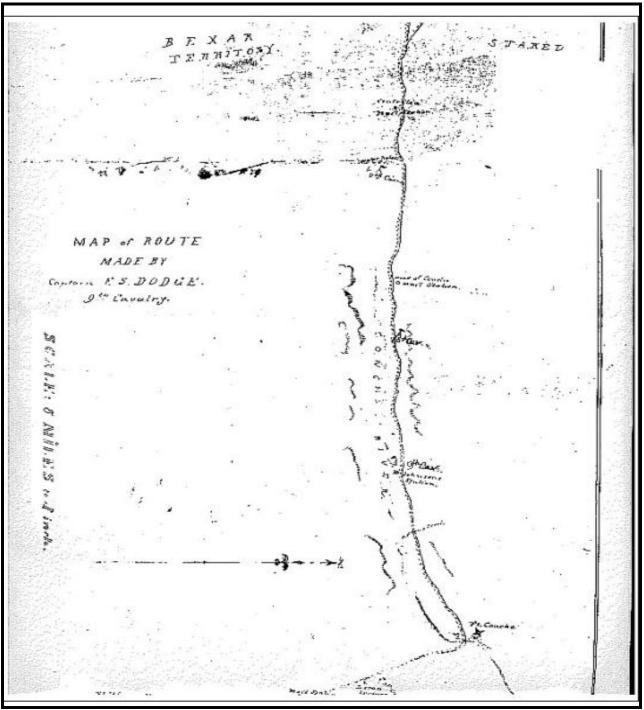
One day just before Christmas in 1869 a band of Indians hit this mail station and ran off five cavalry horses. The raid brought a quick reaction. Fifty troopers rode out of Fort Concho in pursuit. To forestall further raids, the command later dispatched a lieutenant with two sergeants, two corporals, and twenty-three privates of E Company, Ninth Calvary, plus a hospital attendant, headed for Johnson's Station. They planned to stay for at least a month, scouting the region vigorously for hostile bands. (Uglow) It is highly likely that this large detachment once again took advantage of the original Johnson's Station location as its base of operations and artifacts, reported further down in this report, found at the station tend to support this.

Documents from Fort Concho indicate that both Johnson's Stations were well known and referenced by cavalry scouting parties well into 1879. A scouting map of 1872 shows Johnson's Station and two mails stations further on, one of which is Head of the Concho and the other the newer Johnson's Station, but designated only as "mail station." Another scouting map of 1874 shows units of the 9th Cavalry camped at Johnson's Station and 10th Cavalry at Camp Charlotte, but nothing is listed at either of the mail stations. Since mail station guard detachments were constantly detailed to the mail stations during this time, this map was probably intended to show only the cavalry camp locations, one of which being the original Johnson's Station. The map also gives a scale of miles, which matches correctly the 9th Cavalry location to the original

Johnson's Station. Finally, a scouting report of 1879 reports the detachment passed both the "old and the new Johnson's Station" on their way out to Camp Charlotte. Additional evidence of the newer station maintaining the Johnson's Station name comes from multiple reports referencing Johnson's Station and the distances marched from known points to the station. Six reports give the correct distance to indicate they were referencing the newer mail station location. These reports covered the periods of 1872, 1877 and 1879. Two reports give the correct distance to indicate they were referencing the original Johnson's Station. These reports were dated 1874 and 1879. (Concho)



1872 scout map shows old Johnson's Station and new mail station. Author annotation for clarity of old Johnson's Station (Fort Concho archives)



1874 scout map shows cavalry at two camp locations (Camp Charlotte, Johnson's Station) but does not convey the infantry detachments during that period at both the new mail station and Head of Concho mail station. Distance is correct for old Johnson's Station. (Fort Concho archives)

In 1882 all outposts were abandoned as the new railroad line made it all the way to El Paso and the stagecoaches were no longer needed for passengers or mail.

Johnson's Station Ranch Period

The current landowner's family purchased the property that the old Johnson's Station was located on in the late 1890s. There is no family memory of this location ever having a structure or being occupied. In recent years the area had been bulldozed for brush clearing. The known location of the original ranch house is designated 41IR118 and is located approximately one mile upriver and slightly farther inland. It consisted of a pier and beam ranch house with a well and large cistern, sitting on a slight rise approximately a quarter mile from the river.

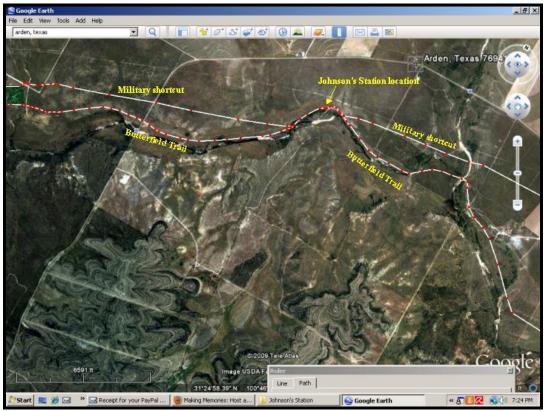
From the mixed period of artifacts, some were quite obviously ranching artifacts, coming out of the Johnson's Station site it appears that in addition to the Butterfield and cavalry period of 1857 - 1882 at least one period in the late 1880s or 90s this location must have been continuously occupied for a short period. This may have been by the partner in the original purchase. The current landowner's grandfather lived in town with his wife and family before moving out to the ranch, probably after the main ranch headquarters was built. However, there is no documentation of where his partner in the land purchase resided after the purchase.

Butterfield Trail and Fort Stockton/El Paso Mail Road

Interpreting the two major trails through the area was as important as the station location itself. In addition to helping determine the likely location of the station, the trails helped to confirm it since they had to run right through or past the station location.

There are actually two trails that run along the Middle Concho River. Fort Concho records revealed that a second trail was built by the military to ease the travel on the wagons and shorten the distances. Soldiers referred to this second trail as either the Fort Stockton Road or the El Paso Mail Road, also known at Grierson's Shortcut. The newer section of trail actually shortcuts the older Butterfield Trail. This is the shortcut referred to by Colonel Grierson in his 1872 writing. The two come within 300 feet of each other in the area of the original Johnson's Station. There is a deviation of the newer trail at that point that actually goes to the station.

Some current topographical maps list this trail as the Butterfield Trail. However, the Butterfield Trail followed the winding river and the newer trail was very straight and usually ran about a half mile away from the river. In the area of the newer Johnson's Station up river the trails merged and from that point west it remains the same trail as the original Butterfield Trail.



Butterfield Trail and later military shortcut built by Col Grierson (Google Earth)



Two trails passing Johnson's Station (Google Earth)

Location and investigation

A satellite imagery search of the Johnson's Station area revealed earth disturbances, leaving the impression of a building and a corral area. The building measured 35 X 55 feet and is on a north/south axis. The corral measured 65 X 65 feet. The Johnson's Station building was said to be a double log cabin with a 10-foot wide dog trot. One side was used as living quarters and the other as a kitchen area. (Wilbarger) These type buildings were very common in early Texas. CVAS excavated a building at Fort Chadbourne in 2008 with the same design and nearly the same dimensions. They were the officer's quarters and the outer foundation boundary measured 51 feet, 8 inches by 33 feet, 4 inches with a 10-foot wide dog trot in the middle. Each side of that building was divided into two rooms. The larger of the two contained a fireplace built on the inside of the room. (Riemenschneider)



Johnson's Station building and corral area via satellite imagery (Google Earth)

For construction of the log cabin, the area was close to a large stand of Pecan trees (referenced in Mr. and Mrs. Evaness 1857 account) that probably provided the wood for the buildings.

A metal detector search of the area revealed two locations, approximately 325 feet apart, separated by the pecan grove of tree. The southern location revealed square nails, dish whiteware and cast iron cookware pieces. A military-issued .50-70 military cartridge found at

the northern location spurred a more thorough search. Many items were scattered throughout the area and an artifact mapping regimen ensued. The northern area turned out to be the main area of this site. There were brush piles in the area due to brush clearing by the ranch, so it could not be determined exactly where any particular item originally laid. Large footing stones were found near the brush piles that had probably been pushed by bulldozers. These stones were large limestone and not natural to the immediate area. They were large enough to be footing stones for a pier and beam log cabin construction.



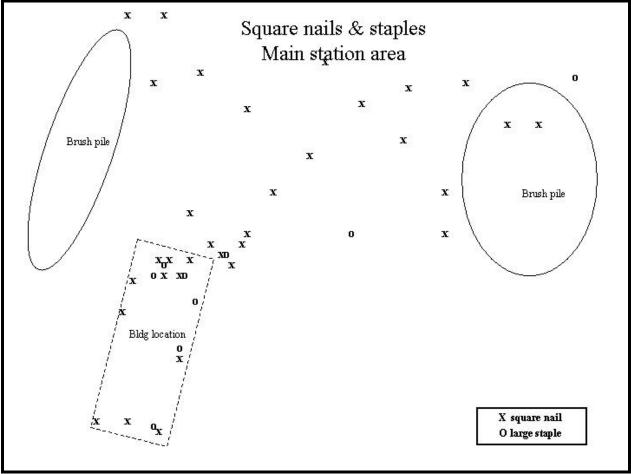
Unearthed limestone probably used for footings of pier and beam construction

A metal detecting search of the identified area to the south revealed a good number of objects, many of which were within or around the perimeter of the bounded area later identified as a probable building site through imagery interpretation. Artifacts found in the area were either surface finds or averaged 3 - 6 inches in depth. Many of the objects were building related (e.g. square nails, large wood staples). Other objects included cooking and eating utensils as well as and military and civilian cartridges.

Some of the items found at the main area were consistent with late 1860s early 1870s, civilian and military. Many items just could not be tied down to one period or another. It appeared this site covered multiple periods of occupation (Butterfield Overland Mail, 1860s & 70s U.S. Cavalry, 1870s & 80s civilian, and 1890s & early 1900s homesteading). The secondary building, located 225 feet away in the trees, probably had some relationship during one of these periods, but which period or exactly what the relationship could not be determined. The entire area covered approximately five acres and was designated as a single site.

Results of the Johnson's Station Archeological Investigation

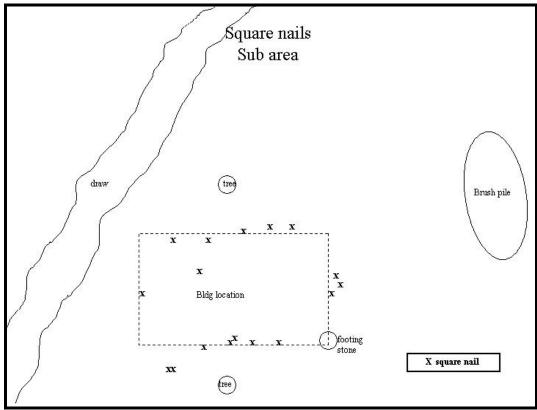
Although seemingly less significant, square nails played a major role in determining the location, size and likely structure of the two buildings at this site. As explained previously, the original site location and at least one of the building structure locations and dimensions were originally determined through satellite imagery interpretation. Although many of the artifacts were moved through previous bulldozing of the area, the number of nails helped support the likelihood these structures were of log construction and the patterns were enough to discern the likely orientation and size of the structures. Nail sizes varied from very small to very large (6 inch) and every size in between. Since it appeared that large staples (usually used for fencing) were also used in these structures, those were also included in the pattern analysis.



Square nail and staple distribution at main site location

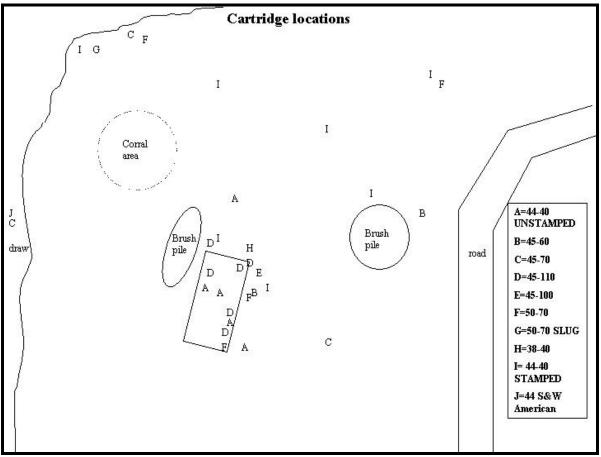
At the main station site many of the nails appeared to have been randomly distributed by the bulldozing activity. However, the numbers support a probable log cabin structure and the concentration along or close to the assessed building perimeter support the building location, size and orientation. Six round nails were also found within the site area. These probably came from the occupation during the early homesteading period. Large-scale production of round wire nails began in the U.S. in the 1880s. About 1890 wire (round) nails became more popular than cut nails in the United States. In the Far West wire nails outnumbered cut nails by about 1900.

At the southern building location there was also a concentration of square nails. The distribution and orientation supports the assessment that this building was of similar construction as the main area -35×55 foot log cabin. The only discernable evidence of period is a single shotgun shell found at this site dating to the proper period of military occupation. It's possible the Fort Chadbourne soldiers may have occupied this building during their six-month period of occupation in 1867.



Square nail distribution at building #2 (southern) location

A pattern analysis could be conducted with the relatively numerous cartridges found at the main building location. Once again the pattern showed a correlation to the main building location, size and orientation as interpreted through satellite imagery. The most numerous of these cartridges found around the building perimeter were the Sharps 45-110/45-100, unstamped 44-40 and the military 50-70. It is hard to accurately assess what all the firing was being conducted for. It is possible that buffalo/deer hunting was taking place, but it seems unlikely to be taking place from an occupied building and with such numbers and variety of cartridges. Given the numerous reported encounters with hostile Comanche Indians in the area during Fort Chadbourne and Fort Concho cavalry period it is not too big of a leap to theorize that occupants at this location often believed they were defending themselves from hostile bands of Indians. However, cavalry units officially reported none of these types of encounters from this location. A possibility could be that night guards - military or civilian - used a 'shoot first, ask questions later' approach when encountering any perceived encroachment on their camp, whether it be actual or imagined.



Cartridge distribution at main site location

Although many of the artifacts are general in nature and cannot be tied directly to one period or another, some of them can be assumed to be from four specific periods of occupation (i.e. Butterfield Overland Mail, U.S. Cavalry, possible buffalo hunter camp and ranching).

Johnson's Station Butterfield Overland Mail Period

One 54 caliber round ball was found on a rise above the main site area, approximately 350 feet away from the building location. The ball was probably dropped. The seam is very apparent and the cut from the mold. The ball is uneven, measuring from .501 to .540 inches, with the most common measurements being between .520 and .530 inches. The 54-caliber flintlock was a common trade gun for the Indians and this ball could well have come from one of the two documented times Comanche Indians attacked the stage station. Additionally, a 4.25 X .5 inch thin strip of lead was found about 240 yards from the station. This was probably to be used for making of lead ball and dropped from a pouch.

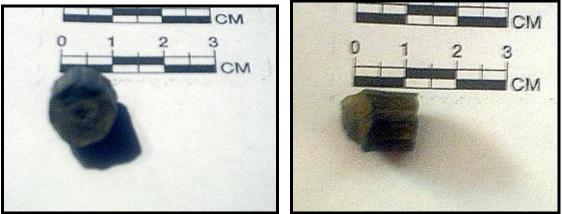


.54 caliber round ball



Typical .54 caliber flintlock Indian trade gun (www.apacheria.com)

Another unusual lead bullet from a probable percussion pistol was found on the Butterfield Trail leading up to the station, approximately 550 feet out. It has an unusual hexagonal shape with straight grooves running lengthwise of the bullet. The diameter ranges between .442 and .445 inches.



Hexagonal shaped bullet

The length and weight are almost half of the famous Whitworth hexagonal bullet from the Civil War, so the assumption is it must have come from a pistol rather than a rifle. The only pistol we've been able to research that fits this bullet is a double-barreled percussion boot pistol. This pistol would be of the type possibly carried by persons during the Butterfield Overland Mail stagecoach period.



This double-barreled boot pistol with hexagonal bores is 6.5 inches long with a 3.5 inch barrel. The hexagon barrel is 3/8 inch, which fit the hexagonal bullet found along the Butterfield Trail.

A very large tin spout canteen dug up in the area of the main site cannot be matched with any known military canteen of the period. The depth was much deeper than any other artifacts excavated, indicating it was discarded much earlier than most of the artifacts. It is an unusual 12 inches in diameter and probably held two quarts of water. It has a tin spout. The tin spout canteen was popular prior to and throughout the Civil War. The tin spout was soldered onto the canteen and was well known by the soldiers for failure. Later the spouts were made of pewter. Although this canteen it was constructed of the two pie shaped pieces soldered together, the spout is offset from the seam rather than soldered on the seam. Due to the size it was probably carried on wagons rather than by horse. The stage drivers of the Butterfield Overland Mail carrying their own personal canteen and each passenger was allowed one personal canteen to carry. Since they were passing long distances across very dry country the canteens would have had to be as large as possible. This may have been one carried by either the driver or a passenger that failed and was thrown away at the station.



Excavated 12-inch pre-Civil War period canteen



12-inch tin spout canteen

Johnson's Station U.S. Cavalry Period (1867 – 1882)

The .50-70 and the .45-70 cartridges found at this site are one of the most direct connections to the U.S. Army occupying this location. The .50-70 Government cartridge was a black powder round adopted in 1866 for the US Springfield Model 1866 Trapdoor Rifle. The cartridge became the official Government cartridge of the US military until replaced by the .45-70 in 1873. Two types of .50-70 cartridges were found. Two cartridges were internally primed Benet cup and likely fired by a Model 1868 or 1870 Springfield or Remington carbine. This is based on the lack of firing pin drag common to the Sharps carbine. One cartridge is a Remington-made Berdan cartridge, externally primed brass with a raised ring. The firing pin markings show this was fired from a different rifle than the Sharps, but identification could not be determined.





.50-70: internally primed Benet cup Remington Berdan cartridge

One 50 caliber slug was also found that was mushroomed close to where the first .50-70 cartridge was found.



.50 caliber bullet found not far from .50-70 cartridge

A 10-gauge shotgun shell stamped UMC CO No 10 was uncovered at the site of the second building to the south and in the Pecan grove from the main building. In 1873, UMC acquired the patent rights to the C.D. Leet Company's paper shotshells and began manufacturing primed but unloaded paper shotshells in 10- and 12-gauge loads. During the 1800s shotguns were a popular weapon employed by cavalry units. Cavalry units on both sides of the American Civil War employed shotguns. American cavalry (military as well as Texas Rangers) went on to use the shotgun extensively during the Indian Wars. Horseback units favored the shotgun for its ease of aiming and devastating close range firepower.



UMC No 10 shotgun shell

Another cartridge from the U.S. Army period of occupation found here was the .44 Smith and Wesson American. The 44 S&W American was one of the earliest American center fire revolver cartridges. It was used in the S&W single action Model 3 revolver. It is known to have been in use late in 1870 and was probably introduced as early as 1869. The U.S. Army used this cartridge and revolver until 1873. (Barnes) When it was introduced, many officers and enlisted men preferred the Smith & Wesson No. 3 to the much slower to load Colt Model of 1860 .44 cap and ball. While the US Army bought about 2,000 No.3 Americans for issue, large numbers were also privately purchased by the troops. The Model No. 3 S&W was carried in many engagements

against the Indians, long before the Colt was finally issued. According to 1874 ordnance returns the 4th Cavalry still had a few .44 Smith & Wesson revolvers in use at the time. (Cruse)

Sitting on top of one of the brush piles and next to the stagecoach building site was an M1858 cavalry canteen. A pewter spout for this canteen was located approximately 200 feet away. Two one-inch roller buckles, commonly used on the M1858 canteen leather sling were also found - one at each of the building site locations. Finding one of these buckles at the second building location helps support the theory that this second building may have been built by soldiers during the early 1867 six-month occupation period. The canteen leather straps were on all pre-1862 canteen issues. After that they went to cloth straps.



M1858 canteen and buckles commonly used for leather canteen slings

A military knapsack brad similar to those found at many Civil War and Indian war battle sites was also found.



Knapsack brad adjustment

The lead-soldered lap side seam No.2 cans like this was common for army provisions. Many of these cans were found on this site and are of the same type found and reported on from the Battle of Red River site and Indian Village 41B1544 in Tule Canyon (Cruse).



Lead-soldered lap side seam No.2 can

A Confederate made eight-bar curry comb, also of the same type found at a the Battle of Red River site and Indian Village site 41BI544 in Tule Canyon and additionally excavated in Tennessee at a Civil War battle site and displayed in the book 'Confederate Saddles and Horse Equipment,' by Willliam Stone. Each cavalry soldier was required to carry a currycomb like this in his saddlebag. (Cruse).



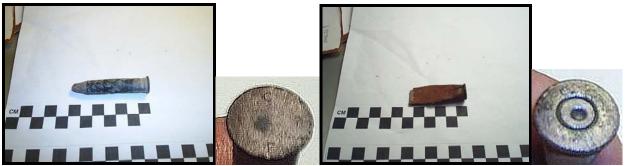
Confederate-made cavalry eight-bar curry comb

One unstamped .45-70 or .45-55 (the only difference was the number of grains internally) and two stamped cartridges were found at the site. The headstamp on the first one indicates it is a <u>*C*</u>arbine cartridge made at the <u>*F*</u>rankford Arsenal in March (<u>3</u>rd month) of 18<u>78</u>. The second

headstamp indicates that it was a \underline{R} ifle cartridge made by the Union Metallic Cartridge Company of \underline{B} ridgeport, Conn in October of 1878. Also, the two fired cartridges were crushed, indicating they were probably military. Crushing cartridges was a common practice to ensure Indians could not reuse the cartridges found on the battlefield. It had been found that Indians were reloading inside primed .45-70 and .50-70 cartridge cases that were discarded by the Army. This was accomplished by inserting a percussion cap in a hole punched in the base of the copper case, filling the case with black powder, and inserting either a newly cast or a reclaimed bullet. The practice of crushing cartridges was officially endorsed by the War Department in General Order 13, Feb 16th 1876.



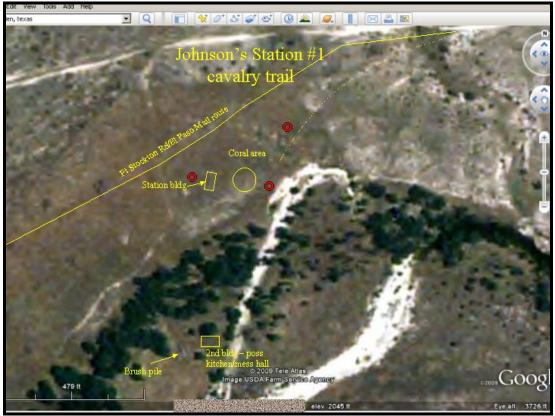
.45-70 cartridge



Unfired Benet primed .45-70

Stamped Berdan primed .45-70

The three 45-70/55 cartridges were found at areas suggesting outer perimeter guard positions. This theory is supported by a number of tin cans found in close proximity to the cartridge locations. These perimeter positions also suggest military using this site as a camp.



Perimeter guard positions (Google Earth)

Johnson's Station Possible Buffalo Hunter Camp

One .45-100 (also known as 45-2.4"), one either .45-100 or .45-110 (also known at 45-2 7/8") and five .45-110 and cartridges were found at this site. All these cartridges were unstamped. The .45-100 is fired. One .45-110 is fired and one is unfired. Four look to be unfired reloads with replaced primers. These replaced primers had marks on them that were probably made by the priming punch used to seat them into place. Possibly related to this, a modified piece of heavy gauge wire that may have been a decapping tool was unearthed nearby. This could have been used to remove the old primers after being drilled.



Sharps 45-110 (left), Sharps 45-100 (middle), two .45-110 one .45-100/110 (right)



.45-110 re-primed cartridge



This was made from a piece of heavy wire and may be a primer decapping tool

The .45-110 Sharps was introduced in 1876 and the .45-100 were added at the end of 1876. The .45-100/110 were widely used by buffalo hunters at the time.

Also, two unstamped .44-60 probable Sharps cartridges with Berdan primers were found at the site – both fired. This cartridge was used in the Sharps Model 1874 and also used for large game and buffalo hunting. The .44-60 Peabody 'Creedmoor' and Winchester rounds were identical apart from designation, but were limited in popularity. The Sharps cartridge was introduced in 1869, Winchester in 1874-75 and Peabody 'Creedmoor' in 1877-78. (Barnes)

Buffalo hunters probably used this unoccupied site as a base camp for a period of time in the 1876 and 1877 timeframe. The buffalo had been visiting the area in the fall of each year for many years as they escaped the bitter winters to the north. Captain R.G. Carter of the 4th U.S. Cavalry, recalled in 1876 countless herds of buffalo in the area between Twin Mountains and the fort, not far from this location. (Hurt) An immense slaughter of buffalo occurred around San Angelo between 1874 and the winter of 1877 when a particularly hard winter forced the bison from the area. (Nickels) A survey party scouting the route through the area for the Texas Western Railway in 1876 reported as many as 30,000 in the area. The herd was so large it took the two men over an hour to ride through the herd. The outfit of Bishop and Sullivan was known to operate a buffalo-hunting outfit along the Middle Concho in 1876. William Kelly financed another outfit known to work the area. His six-man team reportedly killed a thousand buffalo during the 1876 season. (Tom Green)

Johnson's Station Ranching Period

A few of the items found pointed directly to a period of occupation much later than either the Butterfield, military or buffalo hunter encampment period. For example barbed wire of two kinds were found. One was common to the late 1800s/early 1900s but not a unique enough to make a true period interpretation. The second was identifiable to the Scutt Arrow Plate. It is a variation of a patent called the Scutt Single H Plate that was patented in 1878.



Scutt Arrow Plate barbed wire

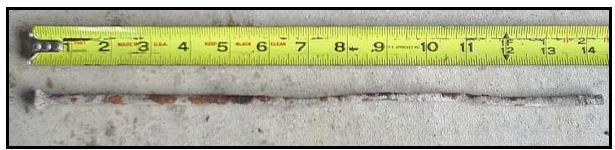
A suspenders clip stamped 'Paris' came from the ranching period. Paris suspenders were made by the A. Stein & Company, which was established in 1887 and incorporated in Illinois in February 1909. The company manufactured garters, suspenders, rubber sundries, and other products of elastic webbing under the trade names "Paris," "Ivory," and "Hickory."

A 12-gauge shotgun shell, marked REM-UMC NITRO CLUB 12 comes from the post 1911 period. Another 12-gauge Winchester shotgun shell, marked LEADER comes from a period of 1894 to 1936.

Four Winchester .44 caliber cartridges stamped 44 wcf, w.r.a.co were found scattered. This cartridge was first offered by the Winchester Company beginning 1886. Hunting or protecting sheep from predators might have been behind these particular cartridges in this area during the early ranching period.

Window glass was found throughout the area in close proximity to building location. Window glass would most likely be put in for a permanent occupant in the late 1800s or early 1900s.

Experts at Texas Wagon Works (Gonzalez, TX), Witmer Coach Shop (New Holland, PA) and Bar E Ranch Wagon Restoration (Clinton, AK) all identified this 14-inch threaded bolt found at this site as a bolt for a box buggy/buckboard. Four of these bolts held the passenger seat board to the body of the buggy box by extending vertically thru the seat board and continuing thru the floor frame of the box body. The length of the bolt plus the height of the seat cushion would give the total height of the seat to allow the passenger leg room for their legs to be down in the sitting position.



14-inch threaded bolt for box buggy seat



Box buggy that would use a 14-inch threated seat bolt (tucsonrodeoparade.org)

This piece is broken at the top where it begins to curve to what looks to have been a 90-degree angle. It has the capital letter B embossed on it. This appears to be a wall mounted bottle opener from the turn of the century. It fits the cap of a bottle perfectly. After the first effective bottle cap was patented in the 1894, people began designing devices to get them open, including the wall-mounted variety.



Probable broken wall mounted bottle opener

The B probably stands for the Betz Brewing Company, established in 1868 and went out of business in the 1930s. Note similarity in the style of the B.



Betz Beer Company beer cap with same 'B' logo (www.trayman.net)

Non-specific Period Artifacts

Artifacts that could have come from any one of the periods, but could not be absolutely tied to one or the other were listed in a general category below with thoughts and comments. Many of the artifacts found at this site were very similar to those found and reported in the 'Archeological Investigations Fort Chadbourne (41CK129) Butterfield Overland Stage Station Coke County, Texas' (Riemenschneider).

Cartridges

Eleven unstamped .44-40 cartridges were found at the site. All have been fired and they appear to come from three different rifles, based on the firing pin strikes. The .44-40 Winchester was introduced in 1873. From 1873 to 1885 the cartridges did not have an identifying head stamp. It was the first center fire cartridge offered by Winchester, and was brought out as the standard chambering for the new Winchester Model 1873 rifle. It was also interchangeable with the Colt Army revolver, but this didn't come until 1888.

All of these cartridges could have come from personal rifles of various cattle drive or trade/freight outfits passing through the area and using the opportunity of a roof over their head. This location was about a day's ride at a slow pace from Fort Concho and a good stopping point. The 44-40 were scattered much more than the other cartridges found in the area. This could have come from bulldozing the area. There's no way to be sure of just why these particular cartridges were more scattered than the rest. It seems unlikely they were used for hunting. Target practice is a possibility, but there may also have been kind of defensive action against Indian raiding parties. Indian problems were still showing up in Fort Concho scouting reports well into 1879.

Household goods and hardware artifacts



Various latches & latch bolt (stamped 117LG)

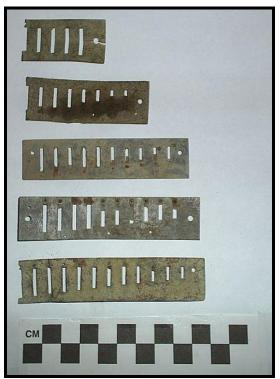


top 2 rows: washtub pieces, third row: possible canteen screw cap, tin can screw cap bottom row: door hinge pin

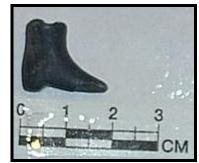


12-inch and 6-inch supply can lids

Recreational artifacts



harmonica reeds



bisque (porcelain) doll foot

Food and beverage preparation and serving



spoons, salt shaker top



various pieces cast iron ware



kitchen items (left to right) top: stove top lid lifter, piece cast iron tortilla skillet middle: dutch oven handle, pot handle bottom: grinding wheel (coffee), lid top hinge thumb lever



various pieces crockery



various pieces white-ware



various pieces bottles



various pieces white-ware



various unidentified pieces



probable oil lamp glass



Green wine bottle pieces



for comparison - green wine bottle dated mid to late 1800s at auction (www.greybirdrelics.com)



Cooking items (top to bottom: ladel strainer, cooking spoon, ladel, cooking item handle)



Possible broken cast iron skillet handle with raised number 7

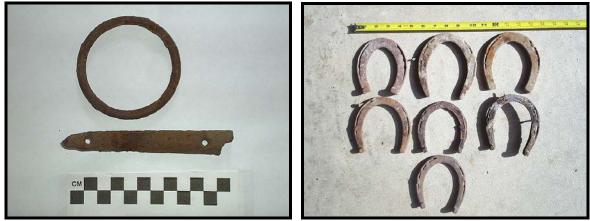
Workshop artifacts

Two seven-inch axe heads were excavated, one near the main building location and the other approximately 100 feet away. These could have been used during any of the periods of occupation, but they are easily large enough to have been used to cut down the pecan trees for building the log cabins and posts and rails for the corral area.



7-inch axe heads

Transportation artifacts



saddle ring & broken singletree piece

horseshoes



wagon plate, possible heavy seat back iron

A martingale found at this site appears to be civilian, similar to the Texas martingales found along other cattle drive routes throughout Texas, but lacking the star in the middle and the flourishes on this one are more elaborate. A martingale is a breastplate on horse tack that are used to control horse head carriage.



Martingale (civilian)

Construction artifacts



Construction tools (top row: lag, metal strap with rivet middle row: nut, chuck for brace & bit, broken hand axe bottom row: lag, bolt [squared on top])



Assorted nails, staple (left) square nails (right) round/wire nails

Summary Of Findings For Johnson's Station

There were many inaccuracies in historical documentation that this investigation cleared up. In addition to the location, it is important to delineate the difference in the first and second Johnson's Station and their general purposes. The first Johnson's Station was the only station used by the Butterfield Overland Mail and the second Johnson's Station was the only station used by the Ben Ficklin/San Antonio To El Paso mail and stage line. Although occupation for the original Johnson's Station was not constant, it was obviously a popular location for a variety of occupants from 1857 until after the turn of the century. There are several fairly obvious reasons for this. First, it was approximately one day's ride at a slow pace from Fort Concho and San Angelo. Second it was near water, wood and good grazing. Third, it had a log cabin that could be used to get out of the weather and provided a certain amount of protection against Indian raiding parties.

The second building on the other side of the Pecan grove is difficult to determine exactly when and who built it. However, a process of elimination can be used to help make an assessment. Items at that main building site, such as barbed wire, late period cartridges and clothing items from the late 1890s and early 1900s, suggest it was also used during the beginning of the ranching period, but this is not the case at the second building location. This second building could have been originally occupied by the stage hands assisting the station master and his wife during the Butterfield period or it could have been built and used during the 6-month period of continuous occupation by the companies from Fort Chadbourne in 1867. If the site needed to house up to 40 troops for six months they may have decided a second building was worth the effort. Unfortunately, most of this building and its contents were probably washed away during major floods in 1882 and 1936.

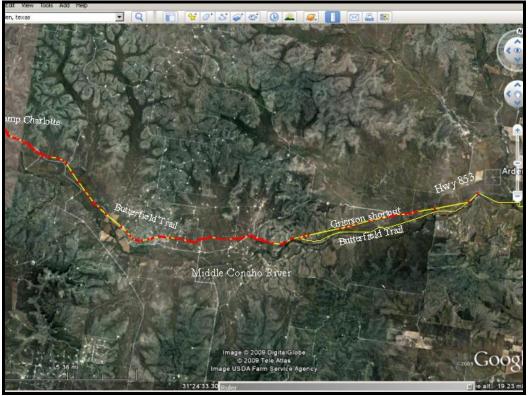
7. Middle Concho River Trail Split And Continuing West

Many locals and Texas State topographical maps show the Butterfield Trail not running alongside the river, but running in a straight line, essentially a half mile from the river. This trail is easier to trace, but was a later shortcut ordered built by Col Grierson while commander at Fort Concho. (Temple) It was referred to at that time as the El Paso Mail Road or the Fort Stockton Road. It merged back into the old Buttefield Trail about five miles west of the original Johnson's Station. From there it went on to the next station in the line, Head of the Concho Mail Station, generally staying about a quarter to a half-mile from the river.



Butterfield Trail and later military shortcut built by Col Grierson (Google Earth)

The Head Of The Concho Station was thoroughly recorded and reported on in a 1996 field project by the Texas Archeological Research Laboratory and Concho Valley Archeological Society.



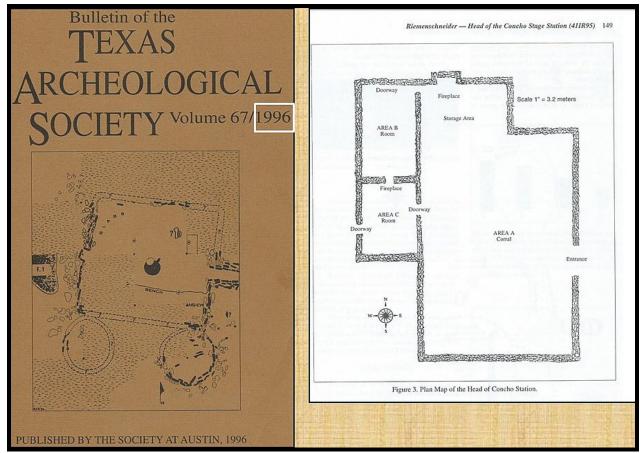
Butterfield Trail continues from Johnson's Station past later location of Camp Charlotte (Google Earth)



Butterfield Trail from Kiowa Creek to Head of the Concho Mail Station (Google Earth)



Head Of Concho Station

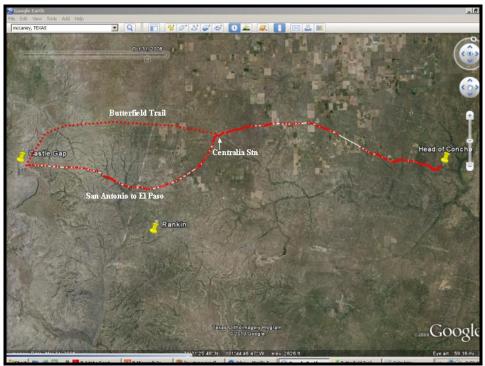


Head Of Concho Station Report

From Head of the Concho Mail Station the trail continued west, with the next significant location being Centralia Draw. The reason Centralia Draw is significant is not so much because of the Butterfield Overland Mail, but because it was a diverging point from the stage line that used the same road after the Civil War. The Ben Ficklin/San Antonio To El Paso Mail line decided that from Centralia Draw the new stage line would follow a southern route to Castle Gap rather than continuing on the northern Butterfield Trail. This is backed up by several documents of cattle trail drivers, who always chose to follow the old Butterfield Trail rather than the newer stage line road. The diverging trails can be seen very clearly in satellite imagery and the southern route can be clearly seen due to its heavy usage over many more years than the northern Butterfield Trail. This southern route is often misidentified as the Butterfield Trail.

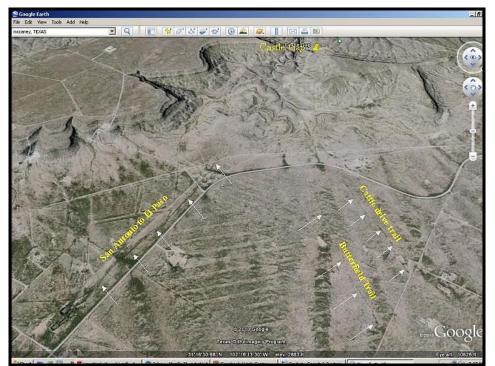


Trail splits at Centralia Draw (Google Earth)



Entire trail section between Head of Concho and Castle Gap (Google Earth)

As the trails come together in order to pass through Castle Gap, 13 miles from the Pecos River, you can see both the southern and northern trail, as well as the cattle trail that paralleled the Butterfield Trail. Charles Goodnight and Oliver Loving made this cattle route famous. Soon, after their initial successes, cattle drives began on a constant basis and had to receive escort protection from the military out of Fort Chadbourne and later Fort Concho.



Later El Paso Mail and earlier Butterfield Trail leading into Castle Gap (Google Earth)

It is logical that the cowboys knew that if they let the cattle actually follow the wagon trail they would destroy it as a road. So they kept their herds paralleling it. The trail on the right is the cattle trail; the trail on the left is the wagon trail.

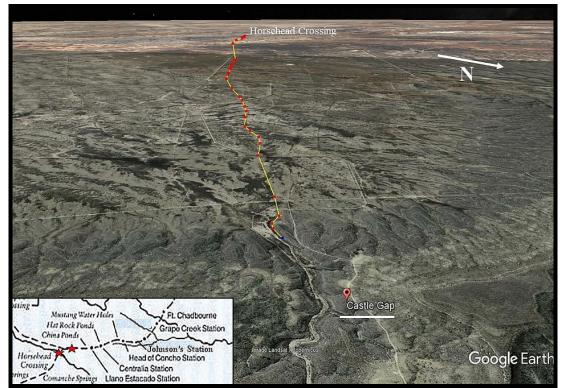


Cattle trail (right) and wagon trail (left) leading to Castle Gap (Google Earth)

Castle Gap was the only gap in the line of hills to get through heading west and all travelers were required to pass through this narrow opening. It was named for the seemingly sheer castle walls.



Cavalry Passing Through Castle Gap In Early 1900s



Castle Gap To Horsehead Crossing

And finally, we come to the famous Horsehead Crossing on the Pecos River. Here, again, satellite imagery continues to reveal new information. First, not all travelers actually crossed the river. The early Butterfield stagecoaches stayed on the east side of the river and headed north to Pope's Crossing near the New Mexico border.

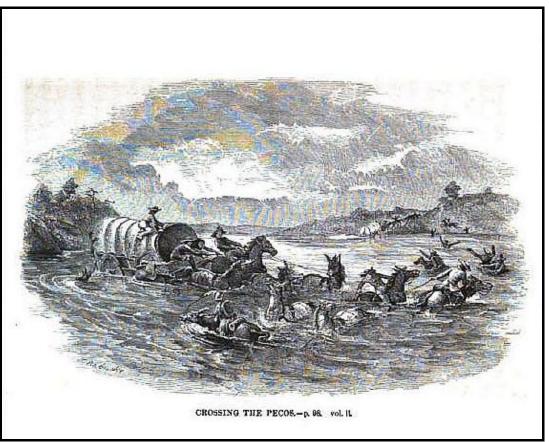


Horsehead Crossing looking east with Castle Gap in the distance

8. The Pecos River Horsehead Crossing

"Oct 30th, 1850: After breakfast, I examined the river with a view of crossing, intending to devote the day to it, and recruit our tired animals. Found the water at Horse-head Crossing, which was a quarter of a mile from our encampment, to afford the greatest facilities. Here there was a bank about half the height of the main bank, to which there was an easy descent, and one equally to the water. It is the place where other parties seem to have crossed, and hence rendered easy of access. I noticed long line of horse or mule skulls placed along the bank, which probably gave it the name it bears." John Russell Bartlett

Bartlett goes on to describe a harrowing experience trying to cross the swift waters and keeping their wagons and mules from being swept away. In order to cross they had to enter the waters and let the stream pull them with the current while making it to the opposite bank, some distance down from the entry point.

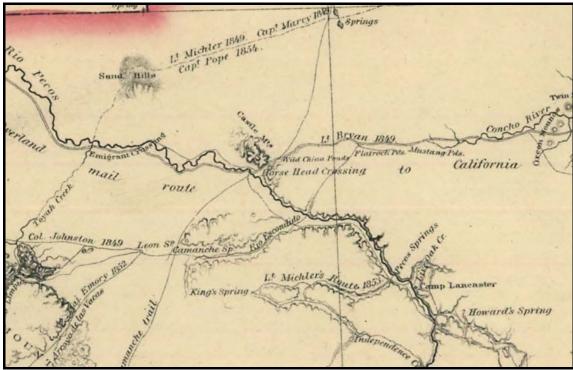


Drawing from Bartlett's account of 1850 crossing the Pecos River at Horsehead Crossing (Bartlett)



Same crossing point of Bartlett's account

Horsehead Crossing on the Pecos River is well known to most folks in West Texas. It was the main crossing for the Jumano Indians on their trading excursions from the Concho River area, the Comanche on their raids into Mexico, the early immigrants on their way to California, the Butterfield Overland Mail, and numerous freighters and cattle drives on their way to and from New Mexico. Horsehead Crossing was one of the few fordable points on the Pecos River in the early days of this wild and open territory. The Pecos River's steep, muddy banks, unpredictable currents, and quicksand were a danger in most other locations for many miles in each direction. After long treks across the surrounding desert, thirsty animals would either drink themselves to death or became hopelessly mired in the mud at the crossing. This was especially true for the Comanche raids coming back up from Mexico, where horses were the main commodity of the raids. This is where the name of Horsehead crossing came from. So many of the horses died that when the immigrants and others making the trek arrived at the crossing they began hanging the horse skulls on the bushes.

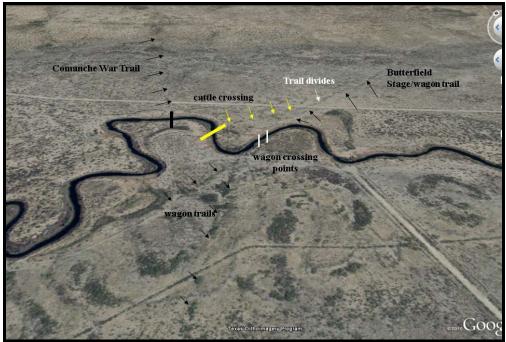


1859 Military Map of Texas with Horsehead Crossing

When Charles Goodnight and Oliver Loving made their first cattle drive to New Mexico in 1866 they weren't quite sure what they were getting themselves into. After 72 hours non-stop with no water they passed through Castle Gap, just 13 miles from the Pecos River. The cattle became crazed for water and when they passed through the gap they could smell the water and burst into a run. They ran so hard that the ones behind the leaders pushed them right across the river so they could not even stop to drink. After the herd crossed the river Goodnight turned them back to the water to get their fill. After a few days of rest they started what remained of the herd up the east side of the Pecos River which was the continuation of the Butterfield Trail, heading northwest toward the southeastern boundary of New Mexico. Their herd of 2,000 was now down to about 1,500. Hundreds were lost on the three-day waterless trek and hundreds more died in quicksand along the river. However, they still made quite a bit of profit for that drive and with that news began the many cattle drives across West Texas and on to New Mexico and Colorado.

To my surprise, in my review of the satellite imagery of the trail leading up to and across the river I found there was not just a single crossing point, but there are three distinct trails that can be seen in the Google Earth imagery and they cross at slightly different locations. It takes a lot to develop a trail that can still be seen in satellite imagery 160 years later, so this was not by happenstance. Other than the main and well known wagon crossing I could see a second trail breaking off from paralleling the wagon trail coming from the east and heading to a different section of the river to cross. This trail is not as distinct compared to the wagon trail and looks much like the cattle trail that parallels the main wagon trail heading into Castle Gap. It appears the later cattle drives were directed to this section, probably to keep them from destroying the wagon crossing location. It also leads right into a perfect bend in the river that could be used as a kind of natural corral for resting the cattle. Finally, I found another crossing that appeared to have no relationship to the wagon trail at all. This trail is very wide and heads northeast, crossing close to the area of the probable cattle crossing, but headed in a completely different

direction. By following it in both directions I determined this to be the Comanche War Trail, headed to Big Spring to the northeast and Comanche Springs, near Fort Stockton, to the south. These were two a well-known watering stops for the Comanche on their raids into Mexico and back. The trail to the south did not follow the wagon roads and had the same indistinct properties as the trail to the north.



All trails leading in and out of Horsehead Crossing, looking from the west. (Google Earth)



Looking northeast with satellite imagery of Comanche Trail (left side) heading to Big Spring (Google Earth)

On my 2010 visit I made it a point to visit each of these locations to determine if the terrain (embankments leading to the water) made sense for a crossing of these types. I was happy to note that the terrain did fit for good crossing locations in each case. The eastern embankment for the cattle was broken down at the exact spots the imagery showed the trail led to. In all cases the western embankments were a shallow and easy rise up from the water. The Comanche Trail crossing point did not appear to be broken down, but was an easy crossing location.

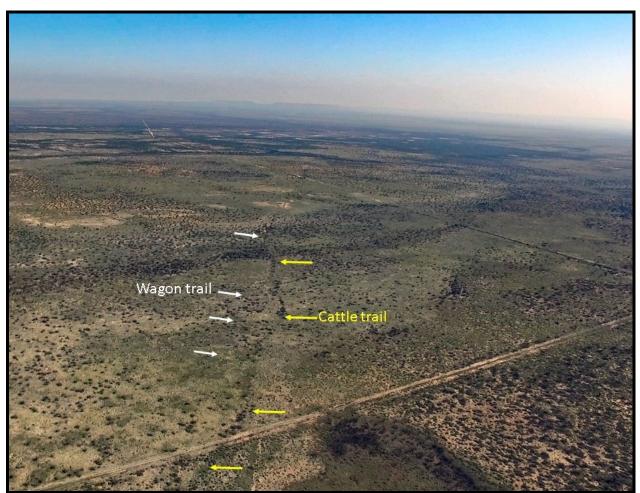


Looking at eastern side of later cattle crossing broken down embankment



Looking at eastern side of Comanche War Trail embankment

I returned to Horsehead Crossing in 2016 to take another look at the trails from the perspective of overhead drone video and pictures. Again, the high altitude drone flight confirmed the cattle trail paralleling the wagon trail leading up to the crossing point and breaking off to proceed to the separate crossing location. The cattle trail can be clearly seen by the change in vegetation, paralleling the wagon trail, which has a very narrow and straight line.



Drone image of wagon and cattle trails

9. Butterfield Overland Mail's Horsehead Crossing Station

Although it's long been known that the Butterfield Overland Mail built a stage station about a half mile up river from Horsehead Crossing, the site's location has never been specifically identified in any archeological publications. This research brings together historical information with satellite and drone imagery, and on-ground reconnaissance to establish the exact location of the site. Found in the National Archives and published by both Patrick Dearen and Glenn Ely was a hand drawn 1869 map of the location of "old" Horsehead Crossing Station, giving the starting point for the search that revealed not only the location of the station, but the Pecos River ferry crossing site used by the Butterfield Company.

<u>History</u>

When the Butterfield Overland Stage came to the Pecos River on its inaugural run on the 26th of September, 1858 the Horsehead Crossing Station did not exist yet. The future location was no more than a camp of one Butterfield employee and 15 Mexican hired hands. The lone rider on the stage, Waterman L. Ormsby, a newspaper reporter for the New York Herald, described the event.

"As I lay dozing on the seat, about three o'clock on Sunday morning, I heard a cry from Jones that we had reached the Pecos River, and there we were, sure enough, right into it. After hallooing and blowing our horn, we obtained an answer, as we supposed, from the other side of the river, telling us to drive up stream which advice we followed, when to our astonishment we found ourselves in camp on the same side of the river. The fact is, the Pecos makes such a turn here that you can hardly tell which side you are on...

We found that Mr. Glover had arrived with his train but a few hours before us and had brought the stock for stocking the road. He had employed here fifteen Mexicans, or "greaser" as they are more commonly called – and a more miserable looking set of fellows I have never saw." (Ormsby)

Several items in this description are telling, as to the location. The camp was up river from Horsehead Crossing, proper, and it was inside a large bend of the river, with the river practically encircling the bend, leading to the comment, "you can hardly tell which side you are on."

Another telling item is the number of Mexicans Mr. Glover had with him. It does not take 15 Mexicans to lead a mule train of 22 mules tied together. Thus, these Mexicans were very likely brought in to stay and build the station as well as run the temporary camp that would meet the stagecoaches twice a week, one from each direction.

It appears the same thing was already ongoing at the next station up the river, Emigrant Crossing Station. Again, Ormsby described it as they arrived after a grueling trip from Horsehead Crossing.

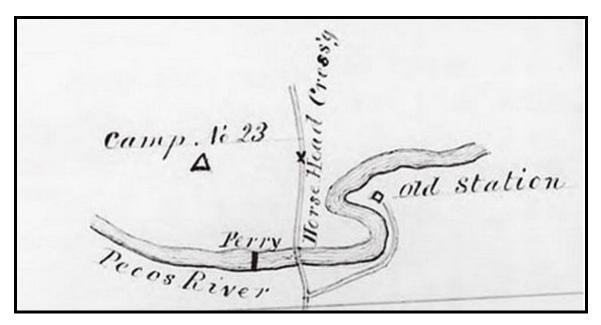
"The three Americans in charge of the station had, with the assistance of half a dozen "greasers," built a very find "adobe" corral, and had started a house of the same material, and calculated that they could defend the stock against a whole tribe of Indians." (Ormsby)

So, the design of the Emigrant Crossing station was a corral and building compound of adobe. This is very much like other Butterfield compounds, whether they were constructed of stone, wood or adobe. The corral and living structure were one enclosed compound for protection of both the stock and occupants from Indian raids. The stagecoaches would drive right into the compound before unloading their passengers and changing out the mules for the next portion of the journey. Horsehead Crossing Station was probably completed in the spring of 1858. But it wasn't long after that the route was dramatically changed, abandoning the northern route and moving to a southern route from the Pecos River through Fort Stockton, Fort Davis and Fort Quitman before heading on to El Paso. They accomplished this by building a ferry system rather than attempting to get a coach across the muddy and swift river. They continued with this method until the station was closed.

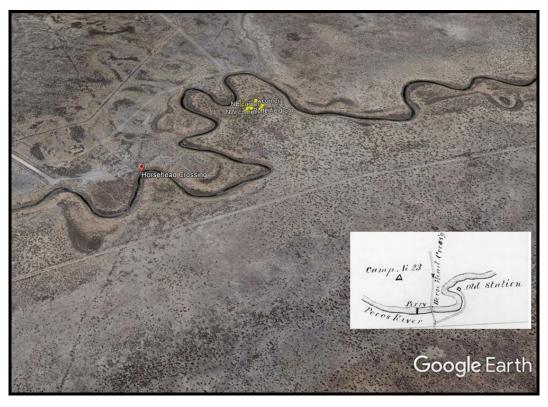
Forage for the animals was brought from Head of Concho Station, 79 miles east. Indians attacked the station at least twice, running off with the mule stock and stealing whatever they could. (Ely) The station was finally ordered to be shut down, along with all other stations, in March 1861 due to the onset of the Civil War.

Finding The Station

The main item of historical significance related to the specific location of Horsehead Crossing Station is a hand-drawn map from Brevet Lieutenant Colonel Thomas B. Hunt from his expedition of 1869 through the Horsehead Crossing area on his way to Fort Craig, New Mexico. This map shows Horsehead Crossing proper, which his unit proceeded through, but he also identified the "old station" in relation to the regular crossing point. This specific river bend can be easily identified now through Google Earth satellite imagery.



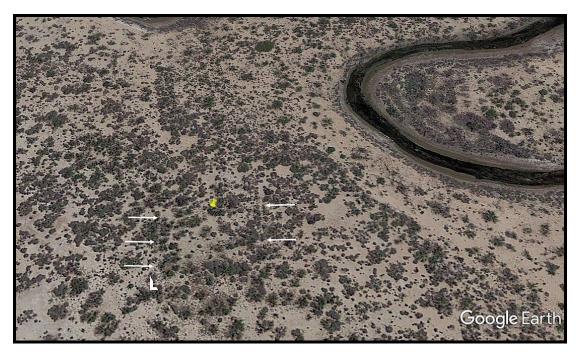
Brevet LTC Thomas B. Hunt, 1869 map (National Archives)



Comparison of Hunt 1869 map and identified location of station through imagery interpretation.

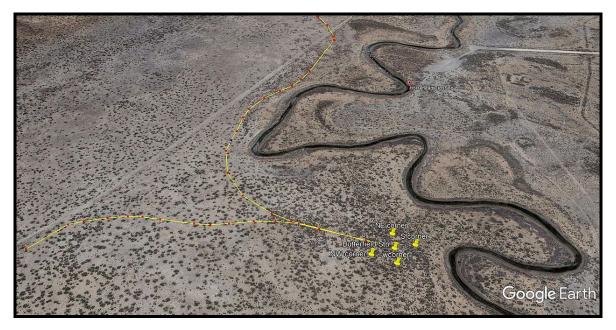
When searching in an area that has had little human activity but has seen great effects by the natural forces the thing to look for within the vegetation is unusual straight lines, 90 degree angles, and unusual greening of an area that has no perceptible reason for such greening. The area of this bend is completely restricted to cattle due to the dangers of the mud and is totally fenced off by the ranchers.

In order to search properly using Google Earth the historical capabilities of the application is invaluable since images will be taken in different seasons throughout the years. Years of drought may reveal things covered during years of wetter weather. In this case the year 2014 was a drought year and is the year that revealed the anomalies in the vegetation. Two straight line remnants of wall structures and one 90 degree angle can be seen in this image.



Anomalous straight lines and 90 angles in vegetation

After finding what appears to be the remnants of a structure it is then time to look for roads leading to it and from where they come. In this case there is a well-known wagon road from the Horsehead Crossing cutoff heading up river to the next crossing point, Emigrant Crossing, and it passes by this bend in the river. From that wagon road another, less well travelled wagon road can be seen in satellite imagery leading in and out of the bend and directly to the location of this former structure.



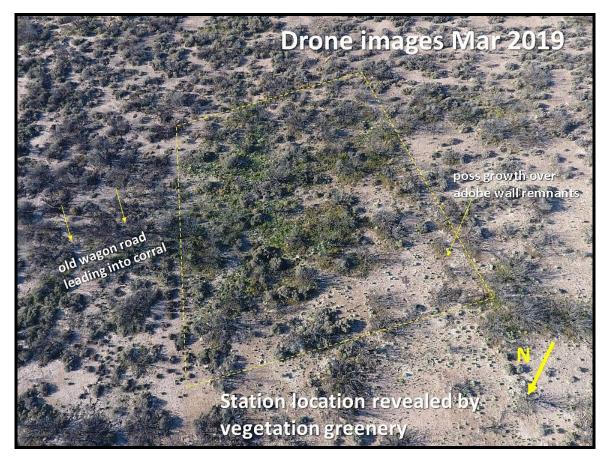
Wagon road leading in and out to the former structure. Note: Long straight line in upper left corner is modern fence line.

Additionally, this road leads directly to what would be the rear portion of the compound. This would be the corral area. In a description given by Butterfield employee, J.M. Browne, the adobe compound layout had the corral area to the rear (nearest the river) and building to the front. (Ely) It was common for Butterfield stations to have the stagecoach drive directly into the compound for the safety of the passengers and station keepers alike while changing out the mules.



Wagon road leading directly into the rear of the compound.

One aspect that reveals the station location, in addition to the 2014 satellite image, are the drone images taken in March, 2019. The drone reveals the site is the only location in the bend with greening vegetation and it is all within the rectangular shape of the old compound. It is very common for former building sites to take on a completely different vegetative cycle after the site is long gone. This is due to process of bioturbation during and after the period of occupation. Bioturbation is the alteration and disturbance of a site by living organisms; the turning and mixing of sediments. In this case it is both human and animal waste products changing the soil which makes it a better soil for plant growth - similar to mulching of a garden - but is a completely unintentional and natural process. The most greening of the site is to the rear, where the mules were kept.

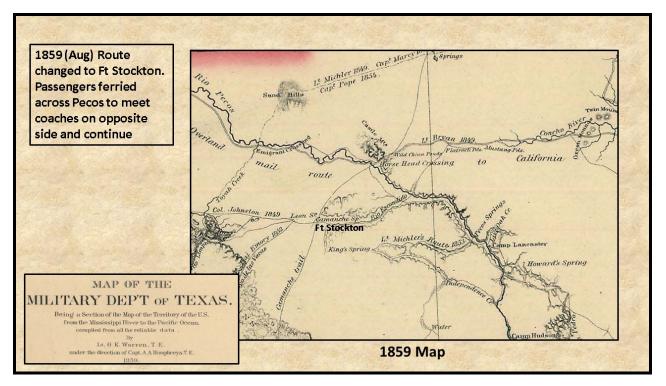


Inside the rectangle the vegetation is greening, whereas the rest of the bend of this river at this time of the year (early Spring) is still totally dormant. Notice the wagon trail running right into the rear of the compound.

One wagon trail within the bend that was not the main road leading in and out was at first puzzling. It ran from the station directly to the river in a southerly direction. This road can be seen as a series of bushes in a straight line. The only reason for natural growth in a straight line would be some kind of draw or change in the earth that would cause the land to be lower for a distance and in a straight line. That was not the case here. With the line of bushes beginning at the station and on level land it has to have been created from a former wagon road.

The documented Butterfield ferry system answers the question to this road's purpose. In August of 1859 it was decided to forego the route further north of Horsehead Crossing and begin operations from Horsehead Crossing south to Fort Stockton. The change was made for several reasons: 1) to add the forts Stockton, Davis and Quitman to the mail route 2) better water sources 3) more passengers were available on the lower route. (Green)

In order to accomplish this change the company built a ferry system near the station. Coaches could not cross the muddy and deep Pecos River and they had no better crossing anywhere to the south. The coaches would arrive on each side of the ferry points. Passengers and mail would be ferried across using a small skiff-type boat. (Green/Ely/Dearen) The skiff probably was connected to a rope line to keep it from being swept downstream with the strong current. The station continued to operate under this route and methodology from this point on.



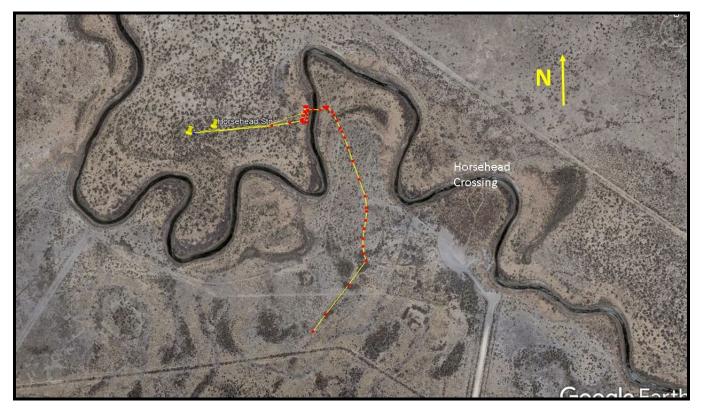
1859 map of road from Horsehead to Fort Stockton ('Ft Stockton' added for location)

In order to verify the wagon road from the station was for the ferry crossing a review of any wagon trail on the other side of the river was required. The result was that a wagon trail can be seen departing the established Fort Stockton road before it reaches Horsehead Crossing proper and heads straight to the river bank directly opposite from the wagon trail turn around on the other side.

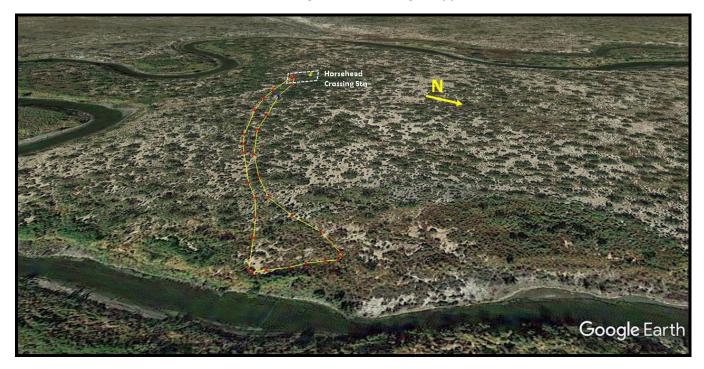


Dark line of bushes is old wagon road from Fort Stockton road to ferry crossing point on west side of Pecos

On the west side of the river the road came to what looks like a turnaround area. On the east side it appears the coach may have driven along the bank in a kind of loop around and back to the station.



Roads from Ft Stockton road and stage station leading to opposite sides of river



A loop wagon road from stage station to river and back to station

Reconnaissance

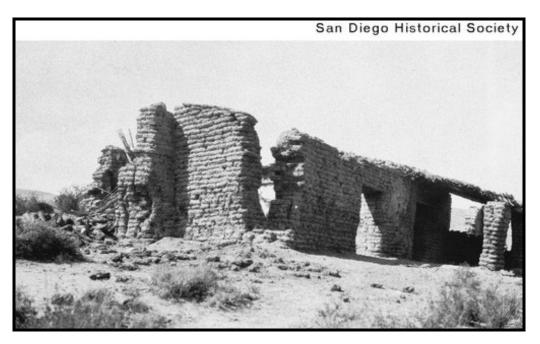
On March 26, 2019 Mr. Ernest Woodward, landowner on the west side of the Pecos River across from the station, and I used his canoe to cross the river and hike to the station site. Upon arrival we found that any evidence on the ground has been completely eliminated by the many floods through this area. Although the river is now a timid reflection of its earlier self, floods of the past were devastating. The Pecos River has a long history of flooding: 1904, 1950, 1952, 1954, 1978, and 2014. (Dearen) The 1954 flood, for example, crested down river at 96 feet and was 3 miles wide, taking entire bridges out as it raged down through Texas.

Although our time on site was very limited, we conducted a thorough surface search and metal detection sweep. The metal detection sweep was negative. This is probably because it is estimated that there is approximately 12 to 18 inches of flood soil on top of any remaining objects left from the station and the metal detector used cannot reach that depth. Additionally, it is known that artifact hunters did find this site in the distant past, probably removing some of the few metal artifacts found. Artifacts were probably very scarce to begin with since this site was somewhat off the main wagon road and the station was only in operation for two years. Finally, it is highly likely the station was constructed out of adobe, making it very vulnerable to the flooding.

On the Butterfield stage inaugural run Ormsby commented on the next station up the line being still under construction by Mexican workers. It was a full adobe compound – corral and building combination. This was likely the same design and construction method used for Horsehead Crossing Station. The soil along the Pecos River in this area is a very sandy loam, the perfect soil for making adobe bricks. It is also the most vulnerable to flooding.

Using the Google Earth measuring tool on the best 2014 imagery of the wall remnants indicates the walls were about 3 feet thick. This is an expected width for an adobe structure since there is very little reinforcement and must be a thick wall to maintain the integrity for the structure.

A good example of this is the Butterfield's Vallecito Station in San Diego County, CA. This 1953 photo from the San Diego Historical Society shows clearly the width of the walls.



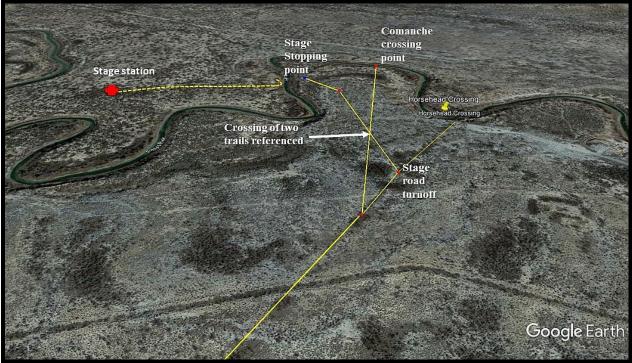
Vallecito Stage Station, San Diego County, CA (1953)

Summary: The satellite and drone imaging can locate the sites of old stage stations, even when they have been completely removed from the landscape and can be used to follow the wagon road directly to the site, supporting the site's location. The only green vegetation in the entire horseshoe bend at the site in the early spring of 2019 was at the site and in a rectangular layout. This is caused by bioturbation and is a telltale sign of previous human habitation when looking for old sites of this type. The measurement of the remnants of the wall structure from the imaging supports that this station was probably an adobe structure with walls approximately 35 feet thick. The location matches the hand-drawn 1869 map by Brevet Lieutenant Colonel Thomas Hunt, adding to the supporting evidence of this being the correct location. Floods either swept away or buried deep any remnants. The documented stagecoach ferry system is also revealed by old wagon roads, one coming from Fort Stockton to the edge of the river and the other leading from the station and back in a loop. Both end up directly across from each other on each side of the river.

10. Horsehead Crossing To Fort Stockton

A first-hand historical account validates this Comanche War Trail water crossing point at near Horsehead Crossing in an unexpected way. The year was 1859 and the Butterfield Overland Mail route had been changed from continuing up the Pecos River and crossing the Guadalupe Mountains to a new route down to Camp Stockton and on to Fort Davis and El Paso through a southern route. A westbound passenger noted after leaving from the west side of the river on the way to Camp Stockton the coach crossed "eight beaten paths, side by side [which] indicated the frequency of their bloody raids into northern Mexico for cattle, horses, and children." (Dearen)

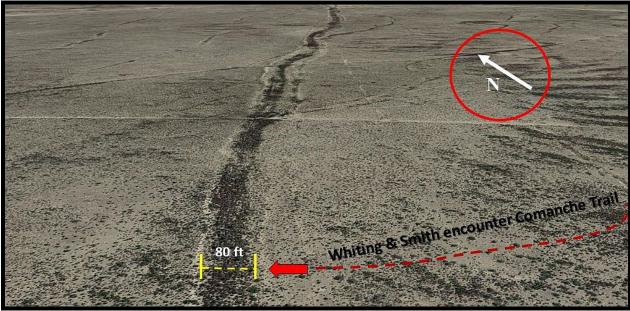
It turns out through Google Earth analysis of both trails the crossing point mentioned by the passenger can be found. Although the stagecoach/wagon road becomes one with the Comanche Trail just a little further to the west, the two trails diverged to their separate crossing points, making an X just before each reaches the water line.



Two Trails Cross - Horsehead Crossing looking northeast

As you can see in the image above the wagon road and the Comanche War Trail merge into one soon after leaving Horsehead Crossing. In fact the wagon road runs right down the middle of the Indian trail all the way to Fort Stockton. At the time I'm sure there was no brush growing up as it is today and it was the easiest ready-made road for the stagecoach and wagons. The road makes a straight line to a low plateau seven miles from the river. Although the wagon road is only about eight feet wide the brush scar averages 40 feet wide all the way to the plateau.

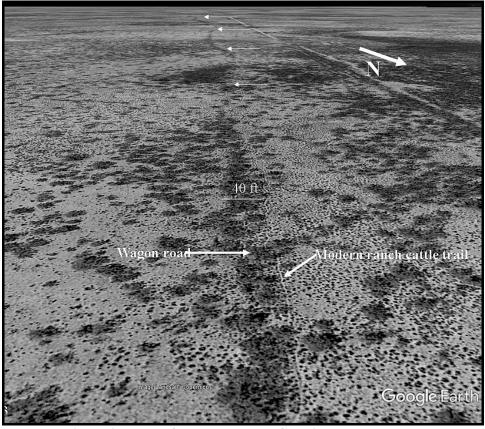
Earlier, in 1849 when the area was first being explored for a route from San Antonio to El Paso by the Lieutenant William Whiting And Smith Expedition they came across the Comanche War Trail while following the Pecos River on the west side. Their journal state they came across "a large Comanche war path which filled us with much astonishment. Close together, 25 deep worn and much used trails made a great road which told us this was a highway by which each year the Comanche of the north desolate Durango and Chihuahua." (Williams)



Whiting & Smith Encounter Location

By following their general path before coming across the trail, which was provided in some detail, it appears the party was already up on the plateau where the Comanche War Trail is the widest when they came across it. This would explain their description of 25 deep worn trails. It also states they traveled on the trail for five miles to camp at Antelope Spring, which was the spring close to the later stagecoach station, addressed further on in this report. That again verifies the location of their intersecting the Comanche War Trail up on the plateau and at its widest point. From Antelope Spring they followed the trail to what they described as southwest to a high table ridge which is now known as the southern point of 7-Mile Mesa, just before you enter Fort Stockton.

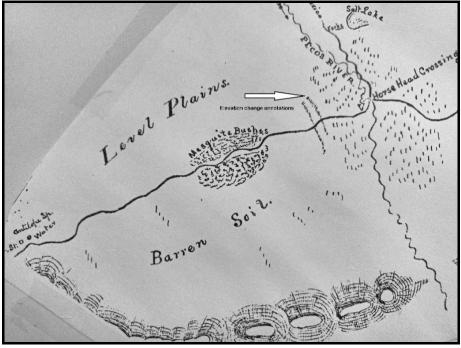
As the trail comes to the plateau seven miles from Horsehead Crossing it climbs a draw leading up to the flat. It makes two elevation changes of 60 feet each. This is the second piece of information that validates this as being trail and wagon road. In 1867 Brevet Lieutenant Colonel E. J. Strang conducted a large unit march from Fort Stockton to Fort Chadbourne, making a detailed topographical map along the way. He used the main wagon road and as he came off the plateau heading to Horsehead Crossing his topographer annotated two elevation changes on his map that match the ones seen on Google Earth.



Trail leading away from Horsehead Crossing to the southwest

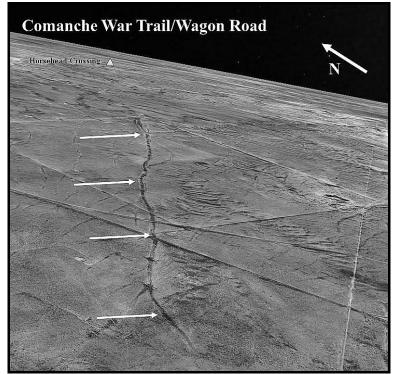


60 foot elevation changes leading up to plateau



LTC Strang map with elevation change annotations

After the trail moves on the plateau proper it really becomes apparent from above. The trail becomes wider and the after-growth brush is thicker. The width ranges from 80 to 130 feet in this area and the scar is very distinct. In a close up view you can also see the wagon road continuing down the middle of it.

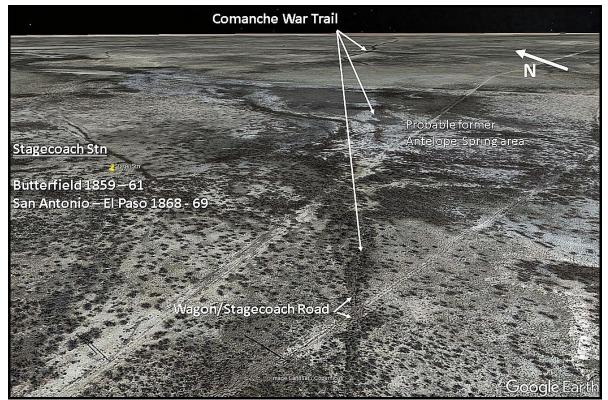


Comanche War Trail looking northeast back to Horsehead Crossing

One of the most important factors of validating a potential trail/wagon road is if a stagecoach station can be verified along the route. And in this case there was a stagecoach station located just off the main road running down the middle of the Comanche Trail. The station was addressed in Glen Ely's book on the Butterfield Overland Mail.

By some accounts the station was either called Camp Pleasant or Antelope Spring Station. There is little documentation on this station since it was built so late in the period of the Butterfield Overland Mail operation due to the change of route in mid-1859 and the abandonment of the entire operation at the beginning of the Civil War in 1861. The station was needed because there was nothing on the west side of the Pecos at their turn around point. Thus, the mule team was required to make a round trip. This was done in the middle of the night and very likely at a walking pace. The station was 23 miles from Horsehead Crossing, making this a 46 mile round trip with a long rest in the middle. This is doable for a mule team, but adding another 22 miles to make it to Camp Stockton Station was beyond the expectation of a mule team, easy pace or not.

We were lucky to also visit the station site with the landowner and verified it was very much the proper construct and layout of a typical Butterfield Stage Station. It was constructed much like the station at Fort Chadbourne, which we personally worked on the excavation in 2008. ⁱ In fact it was the exact same length, 81.3 feet, but 5 feet narrower, at 18.6 feet. This is obviously much larger than a stone-built homestead dog trot style building. Although only the base of the walls remain, a large pile of wall stones were piled some 300 feet away and then abandoned at some time in the past.



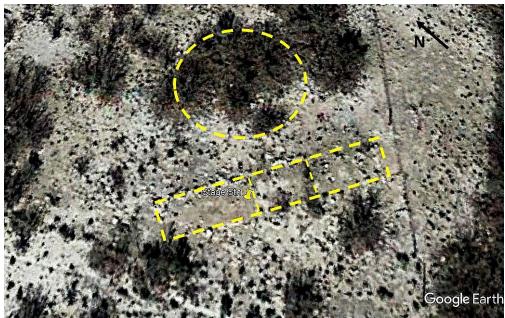
Comanche War Trail/Wagon Road and Stagecoach Station Location

The stagecoach station was accessed from the main road by a service road that angled off the main wagon road from both directions. The area was littered with dishware, much of it probably from a later period than the Butterfield Overland Mail due to the fancy designs and colored dishware. This analysis comes from the excavation of two previous Butterfield Stagecoach Stations in West Texas. ⁱⁱ However, this can be explained by the fact it is highly likely this station was reused after the Civil War by the San Antonio To El Paso Stage Line, also referred to as the Ben Ficklin Stage Line. It is documented that this stage line used the same route to Fort Stockton for a short time beginning in March of 1868. The route was still being set up in July of 1867, which means this station was probably in the restoration stage at that time. ⁱⁱⁱ However, the Indian problems became so acute at Horsehead Crossing (and probably at this location) in the 1867-68 period the commander at Fort Stockton ordered a new river crossing be found 35 miles further downstream. The alternate location became known as Camp Melvin/Pontoon Crossing. ^{iv} The new stagecoach crossing point was just upriver at a site nicknamed Ficklin's Ferry in the fall of 1868.

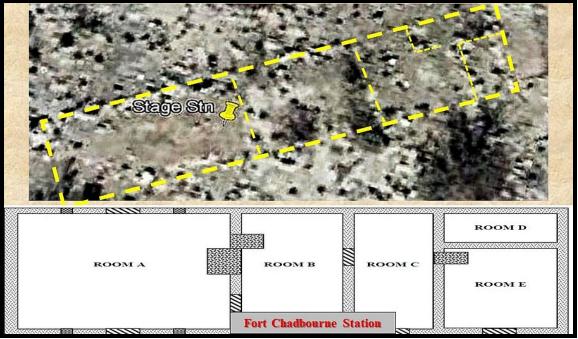
An example of the ambushes taking place regularly at Horsehead Crossing in that period is an account by Charles Goodnight of an entire cattle outfit that was set upon by a large band of Indians while grazing at Horsehead Crossing. Three men were killed, the entire herd was stolen and the Indians laid siege for three days on the survivors who took refuge in the abandoned adobe Butterfield Station before another party, headed up by Colonel William Dalrymple, came upon them causing the Indians to leave with their stolen herd to be bartered off in New Mexico to the Comancheros.



Camp Pleasant/Antelope Spring Station Ruins



Camp Pleasant/Antelope Spring Stage Station Layout

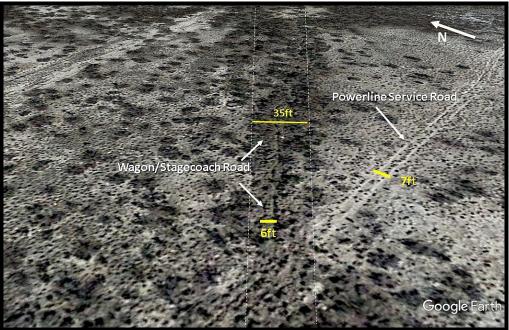


Comparison Of Camp Pleasant and Fort Chadbourne Stations

In addition to inspecting the stagecoach site we walked the wagon road, finding it with the proper wagon rut depressions and wagon width. This road was used up to the early 1900s and we found period tins and bottle trash from that era alongside the road. It was also very apparent the soil in this area is a very fine sand just beneath the surface. This is probably another reason the trail is more defined than other regions.

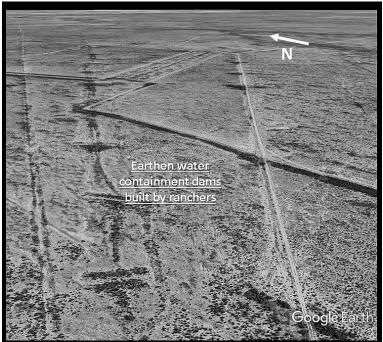
A close up of the wagon road within the Comanche War Trail can be seen in satellite imagery near the stagecoach station. A modern powerline road crosses this area, giving a good

comparison of dimensions. The wheel tracks are 6 foot wide and rutted from the narrow, wooden wheels.



Wagon road within Comanche War Trail after-growth brush

One interesting fact has come out of this imagery analysis. The trail is so wide and deep in many places that modern ranchers have built earthen dams across the trail in order to capture any rain water that might accumulate from storms. In some locations they are set as close as every 300 feet and others as far apart as 700 feet. It also appears these earthen water containment dams were copied to other man-made modern ditches and roads, as can be seen here on the right side of the image.



Modern water containment earthen dams created within the Comanche Trail

From the stage station area the Comanche War Trail/wagon road continues on to Fort Stockton, winding around the southern tip of 7-Mile Mesa, just as reported by Lt William Whiting in his 1849 expedition.



Comanche War Trail/Wagon Road Passing 7-Mile Mesa



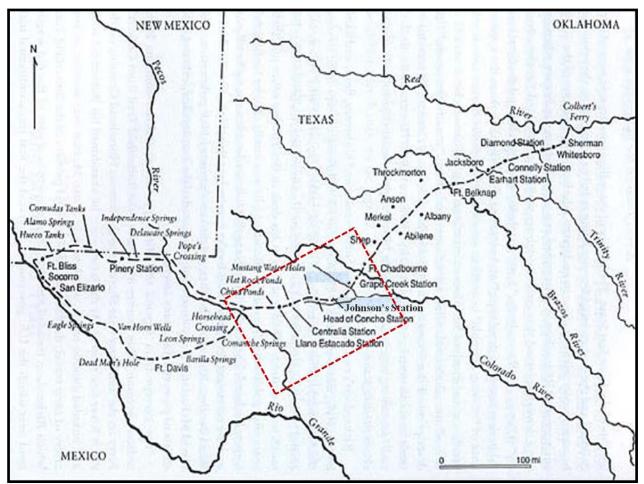
Butterfield Stage With 7-Mile Mesa In Background

Summary

The Butterfield Overland Mail was one of the most significant achievements in the opening of the American West. Prior to the construction of this road immigrants making their way to the west coast had to either pay an exorbitant price for months on a sailing ship or brave the wilds with very little to guide them across and extremely hostile environment. Many did not make it through using either option. The Butterfield Overland Mail Company actually constructed a formal road that could be used by not only their stagecoaches, but any other travelers heading west. For the customers of the stage line, paying a reasonable fee and enduring 24 days of difficult but acceptable travel was more than a reasonable choice compared to the other options.

The trip through West Texas was by far the most severe portion of this route. It was so severe they had to construct special wagons driven by hardy and fairly wild mule teams to handle it. Each stage stop was approximately 30 miles. According to the schedule they covered this desolate section -165 miles - in 36.5 hours.

Hopefully, this study brings back to light some of the forgotten locations and a new understanding of the trail itself through this difficult region.



The Butterfield Trail through West Texas

Biography: Tom Ashmore spent 21 years in the Air Force as a special intelligence/cryptologic analyst. After retiring he worked as a military contractor teaching intelligence skills for 20 years for the Air Force and particularly the Air Force Intelligence School at Goodfellow AFB, Texas for 15 of those years. Working as an avocational archeologist of the past 16 years, he headed up archeological investigations throughout West Texas and Trans Pecos region of Texas. In addition to the Butterfield's Overland Mail stations he has worked investigations of Paint Rock 1800s Historic Camp Sites in Concho County, Tower Hill Military Lookout in Sterling County and ancient rock shelters in the Lower Pecos region of Texas, working with both Conch Valley and the Iraan Archeological Societies. He is currently a member of the Iraan Archeological Societies for Desert Tracks publications and many SWFAS journals over the years.

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