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Archeology and Everyday Life at Fort Union

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ARCHEOLOGY AND EVERYDAY LIFE AT FORT UNION

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WE LIVE IN AN AGE which places great emphasis on specialization, and almost all of us are specialists of one kind or another. The term "archeology" is no longer applicable in its broad sense, because there are several different kinds of archeology and specially trained archeologists. A comparatively recent specialization is generally referred to as "Historic Site Archeology," and represents a break with the tradition that where archeology leaves off history begins and, conversely, that if a thing is historic it cannot be archeological.

We have come, therefore, to accept without reservation the concept of historic site archeology, which uses archeological methods, techniques, and interpretation of historical material uncovered in historical areas. We conceive of historic site archeology in a rather broad sense and include within that general category archeological investigation of any historic site, regardless of the period represented. Thus, despite the time differential, both Fort Frederica, built between the years 1736 and 1748, and Fort Union, extant between 1851 and 1891, have been excavated by National Park Service archeologists who used essentially the same archeological techniques.

One of the most interesting, and rewarding, aspects of the archeological project at Fort Union National Monument, New Mexico, was the search for the ruins of the first post, established by Colonel E. V. Sumner in 1851. By the outset of the Civil War the first Fort

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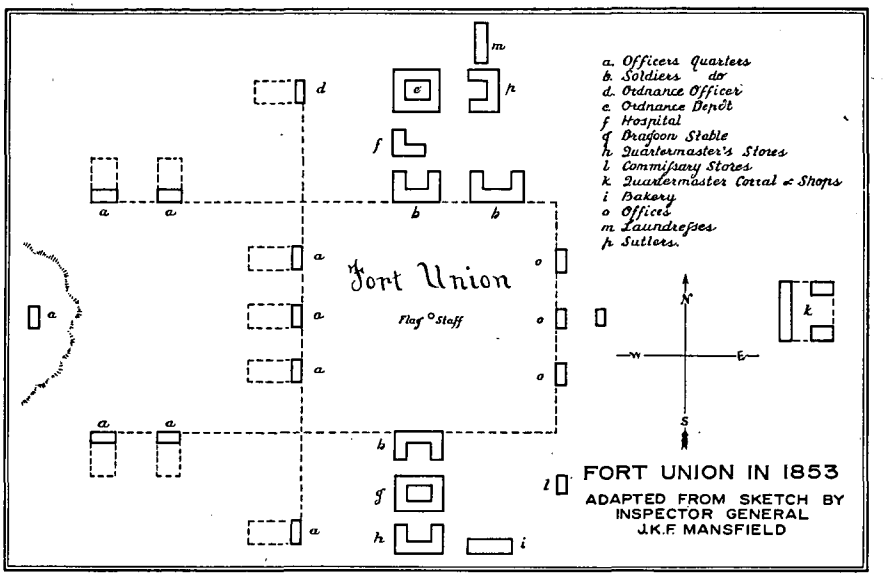
Union had fallen into a state of disrepair, and the site was abandoned in favor of an earthworks known as the "star fort," located about a mile to the east in what the army then considered to be a more defensible position. A mere ten-year period of occupation is represented at the initial site, and there is little evidence remaining on the surface of the ground to indicate the location of the log buildings or the extent of the development.

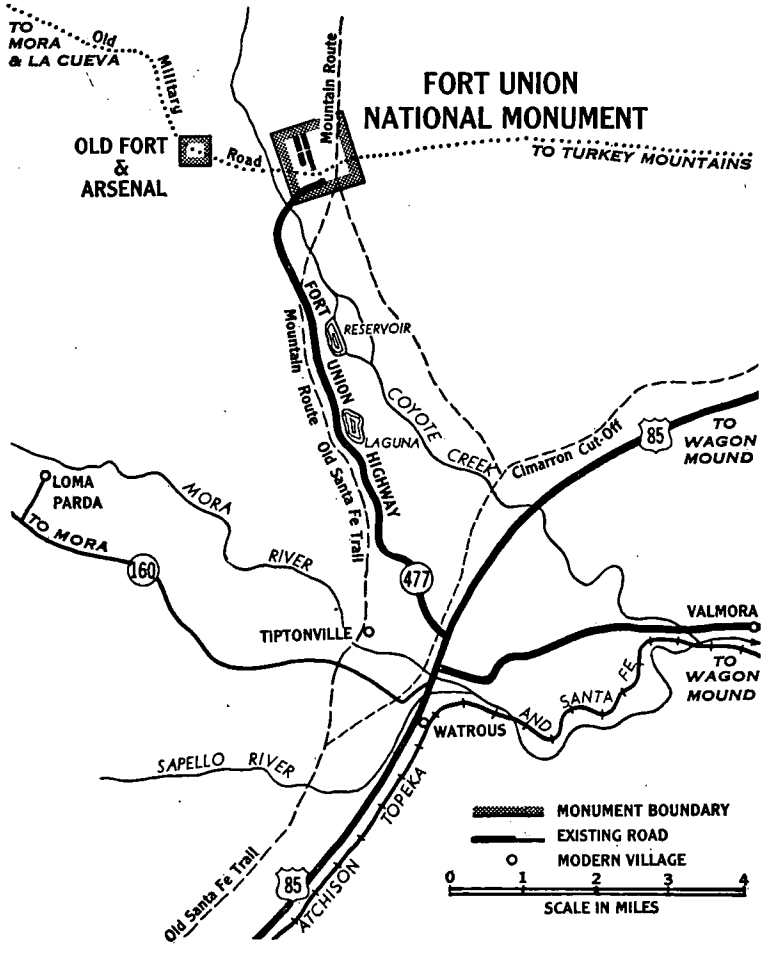
Our first step was to make an exhaustive search of the records to locate any plans, sketches, or photographs of the site. The National Archives was able to provide us with three very useful documents. The first was a blurred photograph of the old fort taken around 1861 from about a mile to the east, which indicated the location of some of the buildings relative to the rocky mesa immediately behind them. A second photograph was of the Arsenal buildings, taken between 1868 and 1878 from the talus northwest of that building complex, showing the crumbling ruins of some of the buildings of the old post in the background. The third document was a copy of a sketch made between 1851 and 1861 by an unknown artist from a vantage point in the talus directly west of the area, from which he could survey the entire layout. Unusually detailed and true to scale, the sketch proved to be of exceptional value. Because the artist had depicted the buildings at the early site as being laid out according to a grid system with standard intervals between the structures, it was a fairly simple matter to locate one of the larger house sites. Having excavated to determine precise locations of its walls and corners, we set up our transit and found eighteen additional buildings. Trenching confirmed their exact locations. A permanent steel marker was set in concrete in the southeast corner of each building, after which the site was mapped by our engineers.

One of the excavated structures proved to be an unlined dirt cellar which had been abandoned as a storage room and filled with trash. From this rich deposit we recovered large quantities of cow and chicken bones, china, and bottles representing the 1851-1861 period, including a salt-glazed ale bottle bearing a William Younger label. It was the only one of its kind found at Fort Union with a label *in situ*.



An interesting by-product of our investigations at the first fort site was the accidental discovery that the deep wagon ruts considered by many to represent the last vestiges of the Santa Fe Trail had actually been cut after the abandonment of the Arsenal in 1878. The darker color of the native gramma grass in the shallow old roadbeds between the Arsenal and the final fort development a mile to the east clearly indicated the several routes of travel between the two areas. At the latest, these roads would have been abandoned when the army withdrew from Fort Union in early 1891. This indisputable evidence proved conclusively that the deep ruts running perpendicular to the shallow roadbeds were cut at least 12 years *after* the railroad had administered the coup de grace to the old Santa Fe Trail.

There are over 153,000 square feet of adobe walls presently standing at Fort Union, the ruins of the largest military supply depot in the Southwest during its heyday. Our stabilization program there was undertaken on a priority basis, i. e., those walls and features in most urgent need of repair were given the earliest attention.



The five remaining chimneys of the fort represented the most immediate problem and were considered to be of greatest importance to the scene. Accordingly, top priority was given their preservation, and their comprehensive stabilization was accomplished. Of only slightly less urgency was the stabilization of the few remaining brick copings. Weighing several tons, each of them remained aloft in a most delicate and precarious state of balance. Their permanence was insured with heavy welded steel reinforcing. Other jobs were

accomplished on a "worst" come, first served basis. Except for a few of the smallest remnants, all walls were capped with soil-cement adobes, and every wall, without regard to size, was protected from further moisture damage by a coating of silicone.

The actual stabilization of the physical remains of the old fort took two years, preceded by nearly two years of excavations to clear the foundations of the buildings of the tons of dirt and debris that lay there. Literally thousands of yards of dirt and debris were removed from the ruins area during the cleanup. All this was dumped at the head of a nearby arroyo. Most of the massive and sterile overburden was removed with a small bulldozer whenever it was practical to do so. Workmen with shovels then continued the excavations to the original soil level. Thousands of artifacts were recovered in this manner, including toys, andirons, bottles, dishes, tableware, axes, an ice cream freezer, and a myriad of other objects representing the everyday lives of a late nineteenth-century people. Unusually productive was an ordnance room in one of the cleared Company Quarters buildings. Although it was only about fifteen feet square, more than 121 bottles were found beneath the collapsed wooden floor, and 59 of them were beer bottles! A large cache of cartridge cases was also found beneath the floor, suggesting a knothole directly above it.

Several late trash dumps located adjacent to the fort were tested, and each was found to contain large quantities of bottles of every description. Because the deposits contained great amounts of moist ashes, most of the glass specimens recovered were in an early stage of decomposition and were quite scaly. Tin cans and other metal objects consigned to the dumps were always in an advanced state of decay, and seldom could a positive identification of them be made. Although some trash was dumped on the surface of the ground, most dumping was in the heads of the several nearby arroyos. During the past seventy years these deposits have grassed over and today are invisible to the untrained eye.

Regardless of their location, date, or relative importance, historic sites have one significant feature common to all: the sink, water closet, or, more frequently, the privy. These often forgotten monu-

ments to our forefathers' wisdom, imagination, and deep concern for basic sanitation facilities are of unquestionable validity in *all* historic localities, wherein they are almost always found. Usually filled with trash, both while in actual use and after their primary function had been served, they have almost never failed to provide an abundance of artifactual evidence of the everyday life of their time. Here, there is no problem of natural stratigraphic sequence. These deposits have remained inviolate since the abandonment of each of the sites excavated.

The disparaging attitude of some of the purists among us notwithstanding, the richest deposits of artifactual materials are usually recovered from historic water closets. We cannot afford to ignore the fact that, like a trash dump or city square, a privy was something of a common denominator on the frontier. From them we can learn a great deal indeed about the everyday lives of our hardy predecessors who committed to these lowly resting places, both voluntarily and involuntarily, an infinite variety of cultural objects that never again saw the light of day in their time.

We do not need historians to tell us that the English colonists at Jamestown had a problem of sewage and garbage disposal. It would, however, be of considerable interest to us all to know how they resolved it. The extensive archeological program carried on there failed to produce the evidence we had hoped for; not a single water closet was found on Jamestown Island!

Historical records indicate that the wretched occupants of the first settlement were presently enjoined from disposing of "slops" within the palisades. Later, there were many ditches dug here and there about the village which functioned as markers for property boundaries and, to a certain extent, as drainage facilities. These ditches were found to contain occasional refuse deposits including household debris. Slops from the kitchen and chamber pots were probably borne to the nearest ditch and dumped. Perhaps these primitive sanitation facilities help to explain the long-continuing and fantastically high mortality rate at Jamestown. We might infer from all this that privies did not become fashionable in Colonial Virginia until the eighteenth century, when urban life proffered its

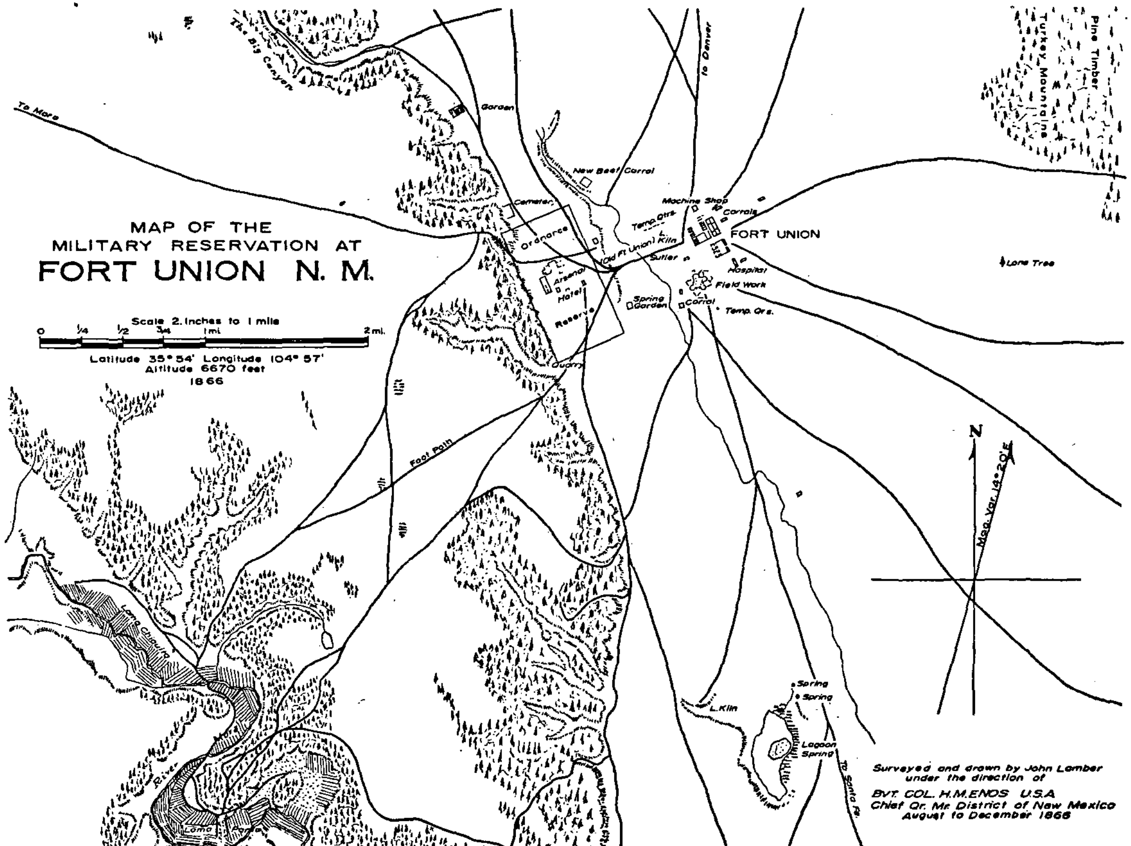
charms, including improved sanitation facilities, to the colonists at Williamsburg.

Archeologists at Fort Frederica, on the Georgia coast, excavated one large sink and two "possibles." Built by General Oglethorpe between 1736 and 1748, the large sink apparently served as a facility for the entire fort and was America's earliest known flush toilet. After the refuse had been routed in and out of a pit and into a ditch that carried it to the river, it was finally borne away on the tide. Although this feature produced no abundance of artifacts, it does shed considerable light on the problems of sanitation in the colonies and the manner in which our ingenious forefathers overcame them. The "possibles" were both well defined rectangular holes, so situated that they did not seem to be mere trash pits. Both of them contained whole objects, such as dishes and bottles. There were undoubtedly many more sinks at Fort Frederica, and their scarcity can probably be explained by the circumstances that they were of a shallow and temporary nature and that many of them did not have superstructures until after about 1750.

There are more privies per acre at Independence National Historical Park in the heart of Philadelphia than anywhere else in our sovereign land. Twenty of them have been excavated in the park or on property immediately adjacent to it. Eleven of these were of eighteenth-century construction; the other nine were built in the nineteenth century.

Archeologists there also excavated a stone and brick sewer arrangement, serving a "necessary" and dating from 1786. All of these pits were brick-lined; most were circular in plan; and the walls were usually of dry laid stretchers, one brick thick. In most cases the lowest course was formed of headers which projected inward. The majority were laid directly on the native soil, but one or two were started on board foundations. One, located in Carpenter's Court and dating some time before 1790, had a depth of 14½ feet, but had been deepened by adding a smaller pit in the bottom of the original one, presumably before use.

Two of the sinks were built and used by Benjamin Franklin and his family; one used between 1765 and 1786, the other from 1786


MAP OF THE
MILITARY RESERVATION AT
FORT UNION N. M.
Scale 2. Inches to 1 mile
0 1/4 1/2 3/4 1 mi. 2 mi.
Latitude 35° 54' Longitude 104° 57'
Altitude 6670 feet
1866
To Mora
The Big Canyon
Garden
New Beef Corral
To Denver
Pine Timber
Turkey Mountains
Cemetery
Ordnance
Temp. Qrs.
L. Kiln
Machine Shop
Corrals
FORT UNION
(Old Ft. Union)
Sutler
Hospital
Field Work
Arsenal
Hotel
Reserve
Spring Garden
Corral
Temp. Qrs.
Lone Tree
Quarry
Foot Path
N
Mag. Var. 14° 20' E
Loma Chiquita
River
Loma
L. Kiln
Spring
Spring
Lagoon Spring
To Santa Fe
Surveyed and drawn by John Lamber
under the direction of
BVT. COL. H.M. ENOS U.S.A.
Chief Qr. Mr. District of New Mexico
August to December 1866

to 1812. They range in diameter from 4 to 5½ feet, and in depth from 13 to about 15 feet. These facilities, and three smaller ones built by Franklin, consisted of ordinary brick pits but were not "open drop" types. In these structures, sewage entered the pits via sloping stone slabs, and actual toilets may have been located inside the associated houses. The existence or nature of flushing arrangements could not be positively determined by our archeologists, but that such a facility was provided can be inferred. On only one privy, located in Independence Square and dating from about 1788 to about 1866, were remains of an above-ground structure recovered. This "little house" had octagonal brick walls and was ten feet in diameter. The pit was located partially under the south wall.

History and archeology team up to identify certain of these features with historic personages. Two of them, located in Independence Square and dating around 1778 to 1790 and about 1788 to around 1866, provided for the comfort of most of the famous statesmen and soldiers of the Revolutionary and early Federal eras since they served the Independence Hall–Congress Hall area during those periods. Two others, located in Carpenter's Court, were undoubtedly used by members of the first Continental Congress. Another, having a diameter of 6 feet, a depth of nearly 9 feet, and dating from 1775 to the third quarter of the nineteenth century, was located in the Dilworth-Todd-Moylan House and modernized the home of Dolly Todd, who later became Dolly Madison. Excavation of the Bishop White House revealed a brick and stone sewer which belonged to Bishop William White, Chaplain of the First Continental Congress and of the Congress of the United States, who later became first Bishop of the Episcopal Church in Philadelphia. Two of the contrivances mentioned in connection with Benjamin Franklin, and four others that were undoubtedly designed by him, may reflect a visit he made to France between 1776 and 1786, where he probably observed such appliances at first hand.

Almost without exception, the old Philadelphia sinks have proved to be gold mines of artifacts; they were the trash pits of their

time. From them have been recovered ceramics, glass, hardware, military items, shoes, coins, and almost every other conceivable kind of artifact. Some of the better collections at Independence were excavated from these old pits.

During their work at Fort Union from 1956 to 1960, historic site archeologists located and excavated many of the old sinks, with the gratifying results to be expected from investigation of these features. As elsewhere, they found a substantial quantity of artifacts in a great variety of forms. Five sinks were dug which date between 1865 and 1890: one in the Commanding Officer's back yard, another in the hospital, two in the Company Quarters, and one at the Sutler's Store. The first four, built by and for the use of the troops, were lined all with stone slabs except the hospital sink which was lined with brick. All had dirt floors, and the Sutler's sink was a simple rectangular hole 8½ feet long, 4½ feet wide, and 7 feet 2 inches deep. The Spartan nature of the latter indicates the almost autonomous character of the post trader's operation. This excavation produced the finest bottle specimens in the enormous Fort Union collection, in addition to complete dinner plates, a leather wallet (containing nothing, not even a credit card), and the only complete white clay "T.D." tobacco pipe found in the four seasons of work at the site. The other sinks also contributed substantially to the collections, including shoes, buttons, bottles, a cow skull, glass, and chinaware. A Sharps 45-70 carbine was recovered from one of the enlisted men's sinks in the Company Quarters area, and two pistols, one an early type flintlock, the other a child's toy, were found in the Commanding Officer's water closet.

Visitors to Fort Union, viewing the two sinks in the Company Quarters, both of which are mute testimony to the skill of the master stonemason, almost never fail to comment on their magnitude. The smaller of the two is 12 feet long, 12 feet wide, and 12 feet in depth; the larger, contiguous to the first, is 24 feet long, 12 feet wide, and 12 feet deep. That the larger one apparently was eventually abandoned, filled, and converted to a kitchen, with plumbing, never fails to excite interest and arouse speculation in all who behold it.