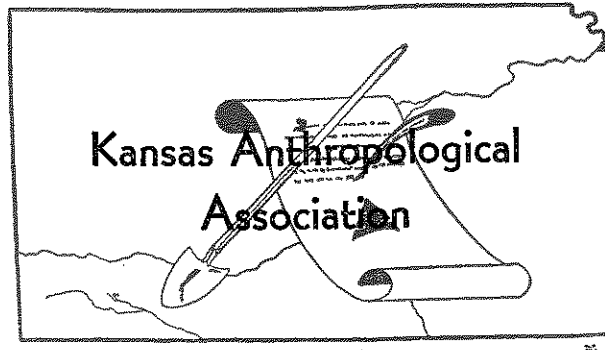


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SUMMARY OF THE EXCAVATION OF THE SUTLER'S STORE, FORT HAYS, KANSAS

by

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During the months of June and July of 1966, under the auspices of the Kansas State Historical Society, the writer supervised a crew of eight men in the excavation of Fort Hays, 14EL301. Jack Hughes, a student from Kansas University was the crew foreman. Excavations were conducted in the area of the sutler's store. This work began the first scientifically controlled archeological investigations of an historic fort in Kansas.

The site of Fort Hays in Ellis county occupies the edge of a bluff or high terrace of Big Creek, which headwaters in Trego county to the west and empties into the Smoky Hill river in Russell county to the east. The site is located in the NW 1/4 of the SE 1/4 of section 5, R18W, T14S, and the elevation of the parade ground of the fort is approximately 2020 feet.

Geographically, the site of Fort Hays lies at the eastern end of the Great Plains province of the Interior Plains. Locally, this region is known as the Blue Hills, and along with the Smoky Hills to the east form a portion of the Dissected High Plains of North Central Kansas. The Blue Hills are characterized by two dissected questas. The eastern quasta is controlled by the greenhorn limestone while the western quasta is an outcrop of Niobrara Chalk (Schoewe, 1949, 310). Between these prominences, the land surface is eroded into the less resistant shales producing a rolling topography. However, where the exposed rock is the more resistant limestone, flat plateau-like surfaces prevail, producing steep rocky escarpments. Such is the case with the basal member of the Niobrara formation, the Fort Hays limestone. It is topographically one of the most predominant rock units in central Kansas. The soil on the hills in the area of the fort is a thin layer of post-Kansan loess which supports a thick cover of buffalo grass. The post-Kansan alluvial deposits on the flood plains of Big Creek are utilized for agricultural crops, and when not cultivated, a variety of trees are found.

Climitological information for the area compiled at the Hays weather station indicates an average annual temperature of 54.1°. The coldest month is January with a mean temperature of 29.4° and the warmest month is July with a mean temperature of 79.3° (Flora 1948). The average annual precipitation is 23.05 inches with a maximum of 4.9 inches occurring in June and the minimum of .34 inches occurring in January.

The growing season is about 168 days with the last killing frost around April 29 and the first about October 14.

On October 11, 1865, issued orders were carried out for the establishment of a fort in the vicinity of Big Creek and the Smoky Hill river. Fort Fletcher (after Thomas Clement Fletcher, then Governor of Missouri) was instituted along with several other forts to protect stagecoach and freight lines as well as settlers against hostile Indians. On November 17, 1866 the name of Fort Fletcher was changed to Fort Hays in commemoration of General Alexander Hays who was killed at the Battle of the Wilderness during the Civil War (Hays Chamber of Commerce, 1959). On June 7, 1867, a flood of Big Creek destroyed a portion of the fort and eight woldiers were drowned. At this time construction of the Kansas Pacific railroad was progressing westward, north of the original site of Fort Hays. Previous to the flood, it was decided to relocate the fort closer to the railroad to protect the workers rather than rebuild the damaged fort (Welty, 1966). A new location was selected and on July 4, 1867 the 7500 acres for the military reservation of Fort Hays was commissioned by the raising of the flag. Actual construction of the buildings began later in the year. Beside providing protection to the railroad workers, in the next several years Fort Hays became an important post in the campaigns (1868 to 1876) of General Philip Sheridan against the Indians on the plains (Rister, 1944). As the Indians menace diminished, maintenance of military outposts on the frontier became unnecessary. In 1889 troops were withdrawn and Fort Hays was abandoned.

A survey taken of the existing buildings and their condition prior to the date the fort was abandoned indicates 36 structures. The sutler's store was not included in this list. Three of the buildings, the guard house, block house and bakery were constructed of stone. Two of these, the guard and block houses are still standing. A fourth building, the ice house, was a combination stone and frame structure (Quartermaster, 1867-1889). Although not checked by the writer, an outcrop of what is called Fort Hays limestone is said to occur two miles to the west of the fort. An 1889 plan of the military reservation boundaries depicts an escarpment in this area and indicates a stone quarry in the SE 1/4 of the SW 1/4 of section 1, R19W, T14S. Possibly this quarry was used to procure stone for these structures. Timber for the remaining frame structure was gathered locally and processed at the fort's saw mill. Roofing and other materials which could not be produced locally were imported generally from Fort Leavenworth.

The recent archeological work in the area of the sutler's store began in two large depressions thought to represent the "cellars" of the store and sutler's residence. Excavations in the first and largest depression revealed a large random cluster of brick overlaying a variety of artifacts. When excavations into this depression were completed, it appeared that the depression represented a V-shaped hole cut by a slip and team. Stratigraphically, there were a series of lenses of ash, soil and refuse, indicating a dumping, burning and covering with soil in a continual process until the hole was filled. The second large depression was rectangular in outline and straight sided pit filled with debris in a somewhat similar manner as the first. Continued excavations to the east of these two pits revealed bits of wood and brick. As more area was uncovered, a series of wood beam stringers and a line of post holes were found to be parallel in alignment 12 feet from each other. At the eastern extent of the beam and post hole lines were two large post holes and joining timber forming the corners of what appeared to be a long rectangular structure. The dimensions of this complex of post holes and beam stringers is 100 feet by 12 feet. At the eastern end of the excavations were another two rows of post holes perpendicular to the long row of posts and beam stringers. How these fit into the overall plan of the structure is yet undetermined.

Also in the process of excavations, six pit toilets were located and dug. The dimensions of these features range from 4 to 6 feet in length, 3 feet in width and 4 to 6 feet deep. A majority of the artifacts recovered from the site were found in the pit toilets. These included bottles, crockery vessels, coins, buttons, spades, axes, horseshoes, household crockery, drinking glasses, pipes and stems, combs, bullets and casings and a variety of other historic items. Three of these pits were within the perimeter of the post and wood pattern representing the structure. It is unknown whether these predate or postdate the existence of the structure. Two other notable features were a pit 4 feet long, 2 feet wide and 2 feet deep filled almost exclusively with ash, and a complex of systematically arranged brick two feet square.

In summary, judging from the shape and material found in the two large depressions at the western end of the excavations, it appears that these were the cellars of the store and residence that were later filled with trash upon the removal or destruction of the buildings. The system of posts, bricks and beam stringers represent a long rectangular structure and are associated with the "cellars" and in general conform approximately to an outline of the building depicted in an early diagram of the fort.

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