

Hoyt House: A Fremont Habitation along Upper Deer Creek, Boulder Utah.

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During a 5 week period in late May and June of 2019, 12 students participating in a University of Nebraska-Lincoln archaeological field school excavated at a Fremont habitation situated along upper Deer Creek, near the modern community of Boulder, Utah (Figure 1). This site, named Hoyt House after the landowner, proved to be an ideal training ground for budding archaeologists in a setting that is truly spectacular. Known previously only to the landowner and a few others based on surface remains, the fieldwork exposed portions of two houses and a few smaller features as well as sampling a trash midden.



Figure 1. Overview of the sand-covered bedrock ridge that forms the setting for Hoyt House. View is to the south looking down the canyon of Deer Creek.

Work at the site progressed in a series of steps that started with mapping, laying out a metric grid system across the site area, and recording surface materials along with selective collection of specific informative artifacts. This was then followed by systematic soil coring across the dune ridge of the site to try and pinpoint where intact subsurface deposits or features might be hidden. Such a minimally destructive approach is an efficient way to narrow down where it might be best to open up excavation units.

Following this preliminary work, a series of 1x1 m excavation units were laid out in areas that might prove most informative about the site. Several of these “test” units were excavated on highest portion of the dune ridge where they soon revealed what appeared to be the remains of two different structures. Additional 1x1 m units were laid out and excavated to more fully expose these probable houses. Ultimately this amounted to an excavation area of 29 square meters: 17 sq m around a burned surface wattle and daub (jacal) structure designated Feature 2 and 12 sq m around a semisubterranean house designated Feature 3, which had not burned. Figure 2 shows an image of the excavation of these features near the end of fieldwork. These structures lie adjacent to each other with the surface jacal to the south of the pithouse. Both structures contained some artifacts from the time of occupation including fragments of pottery vessels, stone flakes and tools, a few bone artifacts, and some lignite (coal) ornaments. A small



Figure 2. Nearing completion of excavation of two structures at Hoyt House on June 22, 2019. The burned surface jacal structure (Fea. 2) is in the foreground and contains an interior slab-lined hearth. The semisubterranean structure is in the background and has less formal basin hearths.

pit in the floor of the jacal was filled with lignite for the production of ornaments. Probably a little over half of the surface jacal was excavated but less than this for the shallow pithouse.

Additional 1x1 m units were excavated in select areas extending down the dune ridge to the south of the structures. About 10 m south of the surface jacal a linked series of four 1x1 units

sampled a trash midden deposit some 20-30 cm thick. This deposit yielded abundant and diverse artifacts along with food scraps such as an animal bone.

Slightly further south four additional 1x1 m units exposed two different types of fire cooking features (Figure 3). One of these (Fea. 5) consisted of a cluster of sandstone slabs that had been laid flat on the occupation surface and then heated, with food items then likely placed on the hot slabs and covered with heated fist-sized cobbles. Adjacent to this feature was a shallow fire basin where the fist-sized cobbles were heated. Sediment samples recovered from these features will be carefully examined for plant and animal remains. In the field we recovered carbonized corn remains in and around the features along with some carbonized seeds of wild plants.

Even further site down the dune ridge students excavated two 1x1 m units to test for a feature that was indicated by material found in rodent backdirt pile. This reflects another way for archaeologists to get an indication of what might lie below the ground surface: look into animal burrows or into the sediment that they have removed. In this particular area tiny fragments of carbonized corn cobs were evident, a clear anomaly. Test units were laid out over the rodent backdirt pile with corn and excavation revealed a shallow pit that appeared to have been used for heating, perhaps as a roasting pit. Charcoal stained fill from the pit contained burned corn cob fragments just like those seen on the surface in the backdirt pile.

All collected materials are currently being processed and analyzed at the University of Nebraska-Lincoln. Two of the undergraduate students who participated in the field school continue to work with the collection. They completed all of the preliminary analysis this fall and are now embarking on a detailed examination of pottery and the flaked stone artifacts. Work on the collection will continue over the next year or two with a final report expected 2021.

Fremont evidently occupied Hoyt House sometime between about AD 800 and 1000; a better estimate as to when this occurred will come from radiocarbon dating of recovered corn portions or similar ideal samples. The site was evidently occupied for at least a portion of the year and repeatedly across a generation or more. Year round occupancy so far seems unlikely since no large food storage features were found. Also, the structures were rather insubstantial for winter residency and lacked hearths indicative of heat generation. The sampled trash midden deposit was also not supportive of winter residency since wood charcoal was not abundant and there were no ash lenses from cleaning out structure hearths used for winter warmth. The story may change, but as of now the site was likely used mainly in the warmer months, perhaps related to growing corn and other crops on the canyon floodplain. Testing on the alluvium might be able to demonstrate whether or not Fremont farmed in this location.



Figure 3. Excavation of a thermal feature consisting of flat-lying sandstone slabs that were heated likely for cooking some food item that was placed on the heated slabs and then covered by the fist-sized cobbles that had also been heated. Carbonized corn cob fragments and some seeds were recovered.