Historical archaeology at the Thayer homestead: progress report of the 2008 and 2009 investigations

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ABSTRACT

Excavations continued during 2008 and 2009 seasons at the Thayer Homestead Site. The uncellared section of the house was investigated exposing the outer foundation and an associated door stoop. The cellar floor was also sampled finding the builders and occupants used the natural shale bedrock for the cellar floor. Yard areas where sampled with systematic shovel tests in a search for midden or dump deposits and a second barn foundation reported in oral history. Midden deposits were located downslope and west of the house. Nearly 6,000 artifacts have been recovered to date with 60% being architecturally related. Ceramics constitute 11% with 58 varieties of tablewares and storage containers. A cluster of reconstructable bottles in one area of the house may be the remains of a former window display. A second human tooth was recovered. Like the first one, analysis of the tooth revealed age, wear patterns, plaque, caries, and fractures suggestive of mechanical extraction. The tooth is plausibly from the same individual.

INTRODUCTION

The Thayer Homestead is one of several apparently well-preserved 19th century historic farmstead sites located on SUNY Oneonta Biological Field Station’s Rum Hill property in the Town of Springfield, Otsego County, New York (Figure 1). This investigation comprises part of a multi-year, multi-site, cooperative archaeological and historical research effort that will provide basic interpretive data about the sites for the Biological Field Station’s ongoing ecological educational program, contribute knowledge regarding historical agricultural practices, human ecological adaptations, illustrate to visitors the methods, techniques, and utility of archaeology and historical research, and will also provide educational opportunities for local primary and secondary school children.
The overall history, context, and research goals for the Thayer Homestead project have been outlined previously (Staley 2006, 2007, 2008). In brief, the Thayer Homestead site consists of a house foundation, several barn foundations, chicken coop, and other outbuildings (Figure 2). A variety of historic artifacts such as glass, ceramics, metals, and farm machinery parts can be observed across the site. Based on historic maps, census materials, and oral history the Thayer homestead property was purchased in 1807, the house built in 1814, and used throughout the century by generations of the Thayer family (Reed 2006). Typical of post-Revolutionary War settlers of New York, the Thayers had emigrated from Massachusetts as an extended family to settle on the rocky,
steep, upland locations similar to the lands they had left behind (VanWagenen 1963; Ryan 1981; Parkerson 1995). The Thayers were also typical in their balance of agricultural production and the sequence of agricultural adaptations and choices (McMurry 1995). Wood products supported the farm’s establishment however, the Thayer’s broad balance of production shifted through time with an emphasis on grain, sheep and wool, and then to hops, and then dairying and the production of butter and cheese (U.S. Federal Census 1850, 1870; Reed 2006). These transitions were typical of agriculture in this part of New York. At some point in the early 20th century, agricultural emphasis was shifted to lands at lower elevations closer to the more developed roadways and lake. Christiana (Dingman) Thayer, wife of Marcena Thayer and the last occupant of the house, died in 1914. The fields surrounding the site and various agricultural structures on the property were used after this date. The house stood until the 1930s, the hop house/barn until at least 1940 (Reed 2006, 2009).

RESEARCH GOALS

Some of the larger, broader research questions approachable from the perspective of the Thayer site regard the evolution of farming in Otsego County and in New York. What was the nature of the agricultural and cultural adaptations on these upland properties? Can the relative involvement in the emerging marketplace be traced at both the Thayer and neighboring sites? What are the archaeological differences between the Thayer and the neighboring properties and do these provide clues as to the greater longevity, continuity, and success of the Thayer property? Can the archaeological record at the Thayer site reveal anything about the transition of agricultural practices and ultimately provide clues as to why this portion of the property was abandoned?

The excavations of the past two years have several lesser, more focused research goals. Detailed mapping has refined the shape and size of the house and its cellar as well as the arrangement of piers used for an assumed chicken coop. Oral history about the site, particularly the structural layout, arrangement, and individual building orientation have been partially incongruous with preliminary findings and interpretations. Archaeological investigations hoped to contribute to a correlation of oral history, historic photographs, and physical remains. Particularly, we wanted to define and orient the house, find the location of the second barn at the site, and identify midden or dump areas on the compound. The exploration of household refuse areas and artifacts in those features would inform us about Thayer family consumer choices and economics.

METHODOLOGY

Over the past two years, students from a Cherry Valley-Springfield (CVS) Archaeology elective class, under the direction of this author and social studies teacher Melissa Jaquay, have conducted the majority of investigations. Teams of SUNY Oneonta Anthropology Department students under the direction of Dr. Renee Walker have assisted by providing direct guidance to the younger students regarding the finer points of
archaeological field methods. Jessie Pellerin of the New York State Museum’s Cultural Resource Survey Program has significantly contributed to the overall effort with GIS and mapping expertise.

The locations of excavation units and shovel tests are presented along with their date of excavation in Figure 2. In the spring of 2008, the CVS students finished two 1 x 1 meter units initiated by the previous class and completed an additional five units in the uncellared portion of the house. These units were positioned to follow the low stone footer and sample the interior of the structure in an attempt to clarify the house outline, orientation, and room function. Another 1 x 1 m unit located south of the cellar entrance, initiated by SUNY students in 2007, continued in 2008 and finished in 2009. Six shovel test pits (STPs) measuring approximately 50 x 50 cm were excavated in the lower area to the west of the house and a possible feature marked by a cluster of rocks. These were excavated to define the function of this possible feature and prospect for refuse areas. A systematic array of STPs was excavated during fall of 2008 in the relatively flat area to the east of the house. These tests were also prospecting for midden deposits but also searching for remains of the second barn structure. In spring of 2009, three units extended our operations in the uncellared part of the house, three more were placed down slope to the southwest of the house further prospecting for midden, one (TU 22) was placed to investigate a possible pier for the house or an addition, and one 1 x 1 meter unit was excavated in the base of the cellar. Our sketch maps of the house foundation and the possible feature located to the west were refined through triangulation from locations on the site grid. Weather conditions and scheduling difficulties prevented any substantive fieldwork at the site during the fall semester of 2009. The test units were all dug to sterile soil, and students recorded artifacts recovered in situ, positions of rocks, and variations in soil strata. All sediments were screened with ¼ inch mesh.

RESULTS

Excavations in and around the uncellared portion of the house have found the outer foundation to consist of unmortared fieldstones two or three courses thick (Figure 3; Photo 1). Stone alignments made of generally less massive stones and varying between one and three courses create internal joist supports spaced 1.5 m (5 ft). The discovery of two possible masonry piers west of the house suggests the house extended further west than previously assumed (Figure 4). The extension and the recollections of Mr. William Reed throw into question our original interpretation of a kitchen room function in area surrounded with the footer wall. Artifact analysis is on going but preliminarily suggests a more generalized room function. A section of iron piping near TU 22 leads us to hypothesize this western extension functioned as the kitchen but the orientation and layout are at odds with recollections (Reed 2006, 2009). An area of flat stones projecting north from the wall alignment in TUs 15 and 21 may represent a door stoop but the units have contained numerous small cast iron stove fragments (51; .86%) so it is plausible these stones may have supported an exterior chimney or stove pipe. Excavations continued to find a nearly ubiquitous layer of wall plaster, nails, and window glass bounded by the foundation representing the dismantling and lumber salvage of the house in the 1930s.
Figure 3: Detail of Site Map and House Foundations.

Photo 1: View of Northern Wall looking East with Possible Stoop in Foreground.
Figure 4: Hypothesized Structure Placement.
The single test in the cellar recovered a modern beer bottle near the surface and historic crockery, bottle glass and shoe leather in buried contexts. The test revealed that the builder’s excavated the cellar to shale bedrock. Based on our experiences, this cellar floor was likely often wet and flooded, and the room probably required some form of engineered drainage system to be functional. A small lump of sulfur cake was recovered from this unit. This product was used in the hops industry to combat powdery mildew and as a bleaching agent. It was also used as a household fumigant insecticide/fungicide like modern day “bug bombs” and used to clean a house after sickness. Sulfur was also used medicinally for skin diseases (Bjorness and Wiewiorowski 2010).

Although no dense midden or barn remains were isolated to the east, a small midden area was identified in TU 17, down slope and west of the house. A concentration of a great variety of artifacts was recovered from a rich, charcoal filled, organic soil. Many artifacts from this unit were burned or melted and were typically highly fragmented.

Further west, an area earlier identified or described as a rock cluster was mapped in detail and tested. Four fieldstone piers or rock piles and a flat area dug into the hill slope mark the location of a chicken coop and/or pig sty as reported in oral history (Figures 2 and 4).

Throughout the site, artifacts are typically recovered from the upper 35 cm (14 in) of soil. Basic artifactual cataloguing has kept pace with excavation and a basic collective description or characterization can be offered at this time. To date, excavations have recovered 5,903 items. The vast majority of artifacts recovered (65%) would generally be classified as architectural such as flat glass (1074; 19%), cut nails (1262; 21%), wire nails (555; 9.4%), wrought nails (15; 0.25%), a selected sample of brick (676; 11%), and plaster (125; 2%). Domestic artifacts include bone fragments (72; 1%), bottle and jar glass (410; 7%), lamp glass (18; 0.3%), glass tableware (2), metal cutlery (6) and ceramics (662; 11%). It is notable that within the category of ceramic vessels we have 58 varieties of stoneware crockery, coarse redware, creamware, pearlware, whiteware, and yellowware representing storage containers, serving containers, and tableware. Personal items include a glass bead, buttons made of metal (4), bone (1), glass (1), and ceramic (2), fragments of Kaolin smoking pipes (6), a jackknife, and a jaw harp (Photo 2). Previous reports had noted the complete absence of tobacco pipes and tin can fragments, these six pipe fragments represent only three pipes and the items are still notably sparse compared to other 19th century sites. Metal can fragments remain extremely rare.

After recognizing that numerous bottle fragments were being recovered from three adjacent units (TUs 7, 8, and 16), the CVS elective class initiated a cross-mending study that brought the fragments together and largely reconstructed four late 19th century bottles from these units plus several others (Photo 3). As a result, it was noted this grouping of bottles displayed a high degree of variability in color, size, and shape. This
Photo 2: Various Artifacts from the Thayer Homestead Site.
led the class to devise and undertake an ethnoarchaeological/experimental study measuring the statistical variability of color, size, closure, and shape for jars and bottles used in four household settings; static displays, pantry storage, wine racks, and liquor cabinets. The Thayer assemblage best matched other modern static displays suggesting that was the behavior that produced this association of bottles.

Of special note, a second human tooth was found during archaeological excavations at the Thayer Homestead. This tooth was recovered from TU 16, the unit adjacent to the previous tooth found in TU 7, with both found at approximately the same 20 cm depth. The tooth is a right, first premolar from the maxilla or upper jaw. Fully erupted when it was lost, it came from an adult individual. It had been in occlusion for at least several years based on the appearance of a very small dot of wear on the buccal cusp and very small flat area on the mesial surface where the enamel was worn from contact with the adjacent canine tooth. The extent of the tooth wear is minimal and indicates the individual was relatively young when the tooth was lost although rates of attrition can vary widely based on a number of factors. The tooth is complete with the exception of a large carious lesion on the side of the crown where the tooth would have touched the second premolar. The cavity appears to have affected much of the tissue under the enamel crown and probably extended into the pulp chamber where it would have caused significant discomfort and pain. There is also a smaller cavity on the other side of the
crown on the surface that was adjacent to the canine. Much like the molar found in previous excavations at the site, this tooth has several fractures in the enamel that extend from the top of the crown down towards the root. If the tooth had been removed during life, it is possible that the fractures occurred as a result of force applied during extraction. This tooth and the one previously recovered are plausibly from the same individual (Anderson 2009).

Analysis of the artifacts and their distributions continues. The collection and catalog are actively used in lab analyses and educational exercises. The world of historical archaeology, local history, and the Thayer Homestead have been presented by CVS students and their instructor through guiding tours and giving demonstrations to various adult organizations and school groups.

FUTURE WORK

Oral history of the Thayer Homestead (Reed 2006, 2009) suggested the house was configured with an uncellared central ell extending toward the creek. The long axis of the house fronted by a porch was to parallel the road up to Rum Hill. The discovery of two piers now suggest a long axis that does parallel the road however there is a large hardwood tree growing within the outline. Further excavations around the house, as well as more thorough artifact analysis, may clarify this possible contradiction. Ultimately, we should be able to define the function of this portion of the house when compared deposits from other parts of the house. The central tree will be cored for a dendrochronology sample to ascertain its maximum age and evaluate the plausibility this area was within the house outline in 1930. We will continue to add detail to the site map with more precise locations of stream boundaries, trails, and former roads.

Oral history also notes a second, larger barn was once positioned north of the Rum Hill road between the house and the hops barn. Surface surveys to date have not identified any stone pilings or foundation nor has shovel testing provided any clues. Our search for this structure will continue through extending our grid of shovel tests. There is the promise SUNY Oneonta Anthropology could assist with a Ground Penetrating Radar (GPR) study of the area searching for stratigraphic anomalies.

Despite several seasons of fieldwork, we remain short of conclusions regarding any of our agricultural adaptations or economics related research questions. These sorts of conclusions may await us only after patient and diligent work and when ultimately compared and contrasted with other similar deposits. We have gained some information about the house and the hops barn and have opened several portals on to historic life at the Thayer Homestead. Life was not the sepia tone or black and white of 19th century photography but brightly splattered with colors and patterns as illustrated by the variety of Thayer household ceramics. People had horrible toothaches and painful extractions but they also enjoyed the pleasures of their music as played on a jaw harp.


Reed, W. 2006. Personal communications with the author. September 24, October 6, and October 20, 2006.


