Report on 20SA1374: the Spencer Farm Drain Trench Project

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20 April 2015

ABSTRACT

Between 20 October 2014 and 30 October 2014, the Historical Society of Saginaw County, Inc.* conducted archaeological testing at the Spencer Farm site (20SA1406) in Bridgeport Township, Saginaw County, Michigan. The testing was confined to a small area slated to be impacted by the installation of a drainage trench in the northwest corner of the site. A ten meter-long trench was excavated in conjoined 100 cm X 50 cm test units. Non-diagnostic prehistoric material including FCR, flakes, and cores and late 19th through 20th century historic material was recovered.

*The Historical Society of Saginaw County, Inc. (HSSC) operates the Castle Museum of Saginaw County History. HSSC and Castle Museum refer to the same institution and are used interchangeably in this report.

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INTRODUCTION

The Spencer Farm site (20SA1374) is located in Bridgeport Township, Saginaw County, Michigan (Figure 1). It is a multicomponent site represented by artifacts collected over a several decade period from a 40 acre (16.2 hectare) farm. The farm collection contains artifacts dating from the late Paleoindian/Early Archaic Period through the Historic Period. A late Paleoindian/Early Archaic lanceolate point from the site was previously reported (Spencer 2010). The portion of the site subject to the archaeological testing described in this report is in the front yard of a house located in the northwest corner of the original farm.

In October 2014, while in the early stages of digging a drain trench, the landowner noticed several pieces of fire-cracked rock (FCR) in and just below the sod. Excavation of the trench was temporarily halted and the occurrence of the FCR was brought to the attention of the Curator of Archaeology at the Castle Museum. Since the area had been farmed in prior decades, the initial trenching was confined to the previously disturbed plowzone. However, when finished, the trench was expected to extend below the plowzone into potentially undisturbed levels. The HSSC was invited to investigate the site and, if we wished, do some testing prior to completion of the trench. Any intact archaeological deposits would be significant, an Early Archaic component especially so. Therefore, the opportunity to test the area before it was trenched was deemed worth pursuing.

Between 20 October and 30 October 2014, archaeologists from the Castle Museum conducted archaeological testing of the Spencer Farm drain trench area. Test excavations yield non-diagnostic prehistoric material and Historic Period material from the 20th century and possibly from the late 19th century. All artifacts, notes, digital media, and other documents resulting from this project will be curated in the Archaeological Repository of the Castle Museum. Archaeological material from the drain trench area was assigned to Accession 2014.177 and includes Catalogue Numbers 2014.177.001 through 2014.177.150.

Acknowledgements

This project would not have been possible without the help of several individuals. First, thanks are due to Bernard Spencer for noting the presence of archaeological material and giving us access and time to conduct the investigation before completing the drain trench. Bernie also made the work much more comfortable by providing access to the warm house located at the site for lunch and other breaks. In addition to the Project Director, fieldwork was conducted by Dave Hamilton and Ken Kosidlo. Lab work was assisted by Nick Bacon, Jana Irving, and Patrick Lawton.



Figure 1: Project Area (derived from ACME Mapper 2.1 image).

ENVIRONMENTAL AND CULTURAL CONTEXT

Environment

The Spencer Farm site is situated in a zone of lacustrine sand and gravel, which "occurs chiefly as former beach and near-offshore littoral deposits of glacial Great Lakes" (Farrand 1982). The soil in the immediate project area is classified as Covert sand, 1-6% slope, nearly level to gently sloping outwash plains and water-worked till plains (Iaquinta 1994). Higher elevation portions of the Spencer Farm site also contains areas of Pipestone sand, 0-3% slope and Granby fine sand (Iaquinta 1994). The present surface elevation in the Spencer Farm drain trench test area is between 182.9 meters above mean sea level (600'amsl) and 184.4 meters amsl (605'amsl). Surface elevations rise to just over 187.5 meters amsl (615' amsl) in southern portions of the site. The 184.4 m elevation corresponds to the highest mid-Holocene level (Nipissing I Stage) of the Great Lakes (Monaghan and Lovis 2005). Consequently, this landform would have been available for occupation (i.e. not submerged) for most of the time people have been present in Michigan.

The Spencer Farm site is adjacent to a small stream locally known as Fish Creek. Apropos of its name, local residents indicate that spring spawning runs of Northern Pike were common throughout much of the mid-late 20th century and presumably prior to that time. The creek is a tributary of the Cass River, which is located approximately 1.6 km to the north. Visitors to the Spencer Farm area ca. A.D. 1800 would have found themselves in a vast Beech-Sugar Maple Forest with smaller zones of Mixed Conifer Swamp, Black Ash Swamp, Mixed Hardwood Swamp and Shrub Swamp/Emergent Marsh within a few kilometers (Comer and Albert 1997).

Culture History

Because of the large-scale interactions that obtained between human groups in the past, culture history must be viewed at a regional rather than local level. Several reviews of the regional cultural developmental sequence have been prepared (Cleland 1992; Fitting 1975; Halsey 1999; Mason 1981). The cultural history presented below is discussed in terms of discrete chronological stages. In reality, the stages grade into one another and there are no distinct boundaries between them. Dates for the stages are presented as radiocarbon years B.P. (Before Present). By convention, "Present" is considered to be A.D. 1950.

The initial human colonization of the Great Lakes region occurred during Paleo-Indian period (ca. 11,500 - 10,000 B.P.). These nomadic hunters and gatherers lived in small bands following herds of large game animals such as caribou and mastodon. In addition to hunting, Paleo-Indians probably utilized a variety of plant species. It is from the end of this period, or the beginning of the next, that we see the first evidence of people inhabiting the Spencer Farm site.

The subsequent Archaic period is divided into Early (ca. 10,000 - 8,000 B. P.), Middle (ca. 8,000 - 5,000 B. P.) and Late (ca. 5,000 - 3,000 B. P.) periods. Archaic groups continued to be highly

mobile, periodically moving in order to exploit seasonally available resources. Towards the end of the Late Archaic period, people in the Great Lakes region began experimenting with horticultural practices as is shown by the presence of wild *Cucurbita* (squash) at around 3840 B.P. at the Marquette Viaduct site in Bay County, Michigan, and domestic *Cucurbita* by around 2820 B.P. at the Green Point site in Saginaw County, Michigan (Monaghan et al. 2006).

The first use of fired-clay ceramics marks the beginning of the Woodland period in the Great Lakes region. Like the Archaic, the Woodland period is divided into Early (ca. 3,000 - 2100 B.P.), Middle (ca. 2,100 - 1,600 B.P.), and Late (ca. 1,600 - European contact) phases. The period from 600 B.P. until European contact is sometimes referred to as the Late Prehistoric Period. Throughout the Woodland period, mobility continued to decrease and cultigens such as squash, maize, and a variety of native seed plants became more important in the diet. By the latter part of the Late Woodland period permanent agricultural villages were established in many parts of the Great Lakes region.

The initial contact between Native Americans and Europeans marks the end of the Late Woodland period and the beginning of the Historic period. Between the 17th and 19th centuries, Native American groups living in what is now Michigan included the Ojibway (Chippewa), Sauk, Fox, Potawatami, Miami, and Ottawa (Cleland 1992; Tanner 1987). Historical records, as summarized by Mainfort (1979) and Tanner (1987), indicate that throughout the 18th century, the Saginaw region was occupied primarily by Northern Algonquin groups including Ottawa and Ojibway. By the late 18th century the Ojibway were the dominant Native American entity in the Saginaw Valley. France claimed much of the Great Lakes region in the 17th century. As a result of the French and Indian War, in 1763 the area fell under British rule. The British period was relatively short-lived and by the end of the 18th century the United States had wrested control of much of the Great Lakes Region from the British.

The 1819 Treaty of Saginaw, negotiated between the United States and the Ojibway of Saginaw, ceded six million acres to the U.S. government and opened the Saginaw region to Euro-American settlement. Throughout the 1820s and 1830s, settlement proceeded at a slow pace and was primarily agrarian in nature. In 1822 a perception of lingering discontent among the local Ojibwa about the terms of the treaty and a wish to encourage further white settlement prompted the Federal Government to construct Fort Saginaw. The fort proved to be a short-lived installation; disease-ravaged troops were ordered to abandon the outpost in the autumn of 1823 (Mills 1918). According to Government Land Office records, the parcel including the Project Area came into private ownership when Norman Little received the Land Patent on October 1st, 1839. The Project Area was only a small part of the 3230.99 acres spread over five Townships in two Counties included in the Land Patent (BLM).

METHODS

Field Methods

When we arrived at the site we found that the upper 10 cm (approximately) of sod and topsoil had been dug along the entire length of the north/south running drain trench. The sod and backdirt was piled adjacent to the portion of the trench from which it was excavated (Figure 2). We divided the trench into one meter-long segments and, starting at the north end of the trench, numbered the segments 0 South through 9 South. The trench actually continued further to the south along the side of the house, but our testing stopped at Segment 9 South. We widened the trench slightly to create standard 100 cm X 50 cm segments. Each segment was excavated in 10 cm levels, measured as depth below surface, using a shovel and trowels. All sediment was screened through ¹/₄ inch mesh hardware cloth. The 0-10 cm level of each segment included the backdirt found adjacent to the trench at each segment. Material from each 10 cm level was bagged and the bags were labeled with the appropriate provenience information (i.e. Spencer Farm, Segment #, and depth), date, and the names of the excavators. Information about each level, including a description of the soil and contents, was recorded on standardized Shovel-Test forms. At least one wall (generally the west wall) of each segment was photographed. The west wall of each segment was graphed and soil colors were recorded using a Munsell Soil Color Chart.



Figure 2: Drain Trench.

Laboratory Methods

In the lab, artifacts were washed in tap water, sorted, and catalogued. Unique catalogue numbers were assigned either to individual artifacts or groups of like artifacts from the same provenience. Artifacts from Spencer Farm are included in Accession 2014.177 and include Catalogue Numbers 2014.177.001 through 2014.177.150. Fire-cracked Rocks (FCR) were size-sorted into >0.5" and <0.5" classes and counts and weights for each size class were recorded. One FCR from the >0.5" size class (if available) from each provenience was chosen as a representative sample and catalogued. The rest will not be curated.

ANALYSIS AND EVALUATION

Site Characteristics

The north/south trending 10 m X 0.5 m test trench is located in the northwest corner of the Spencer Farm site. Soil colors are described here using Munsell Soil Chart terminology. The soil profile at Segment 1 South includes approximately eight centimeters of sod and very dark grayish brown (10YR3/2) medium/fine sand, followed by 35 cm of dark yellowish brown (10YR3/4) medium/fine sand sparsely mottled with strong brown (7.5YR4/6) medium/fine sand. This layer is followed by a 20 cm thick buried A-horizon of very dark brown (10YR2/2)medium/fine sand over 10+ cm of dark brown (7.5YR3/3) medium/fine sand (Figure 3). The buried A-horizon is a former land surface, probably a plowzone, which appears to have been dug or scraped into with lighter-colored soil subsequently deposited on top. The buried surface slopes up to south, eventually merging with the plowzone in Segment 4 South. The soil profile at Segment 9 South includes approximately six centimeters of sod and very dark grayish brown (10YR3/2) medium/fine sand followed by an additional 10 cm of plowzone material consisting of dark brown (10YR3/3) medium/fine sand mottled with dark yellowish brown (10YR4/6) fine sand. The fine sand mottles are derived from the subsequent 40 cm level of dark yellowish brown (10YR4/6) fine sand, which is followed by 15+ cm of brownish yellow (10YR6/6) fine sand (Figure 4).



Figure 3: West Wall Profile North End of Trench.



Figure 4: West Wall Profile South End of Trench.

The buried surface, the plowzone, and the re-deposited material above the buried surface all contain FCR. A small number of Bayport Chert flakes and possible quartzite flakes, a few calcined bone fragments, and few glass fragments and other historic period items have also been recovered. A few small FCR were found in the B-horizon soil below the buried surface/plowzone. However, these may be displaced in burrows or other areas of bioturbation. We did not recover any temporally diagnostic prehistoric artifacts in the test trench.

Artifact Summary

One thousand one hundred and fifty objects were recovered from the Spencer Farm test units. These objects include 498 prehistoric items, 66 historic period items, and 586 objects that could date from either a historic or prehistoric component. The items of undetermined temporal origin include 580 fragments of wood charcoal, some of which are only partially burnt, and six calcined bone fragments. The prehistoric assemblage includes 482 fire-cracked rocks (FCR), only 58 of which were catalogued and several flaked stone artifacts. The total catalogued assemblage totals 726 objects.

Prehistoric Period Artifacts

The 498 prehistoric objects from the Spencer Farm test units include two cores, one utilized/edge-damaged flake, 13 flakes or possible flakes, and 482 FCR. One of the cores is a large (50.3 g), blocky, quartzite flake/shatter with several flake scars (Figure 5, #41). Although this specimen appears to exhibit flake scars rather than heat fractures, it is possible that it is a FCR. The second core is a heavily weathered greywacke cobble (624.9 g) from which several large flakes were removed (Figure 5, #98). Crushing/impact fractures are evident at the origin of the flake scars. One Bayport chert flake in the assemblage exhibits damage on the lateral and distal edges (Figure 6, #22). Five additional Bayport chert flakes and eight quartzite flakes/possible flakes were recovered in the Spencer Farm drain trench test units. It is possible that some of the quartzite flakes are actually heat spalls, or FCR (Figure 7). The FCR assemblage recovered from the drain trench testing includes 217 (209.8 g) fragments in the <0.5" size category and 265 (5540.0 g) specimens in the >0.5" size category. The total assemblage therefore includes 482 fragments and weighs 5749.8 g. Of this total, a sample consisting of 58 specimens (1722.2 g) was catalogued and will be curated.



Figure 5: Cores.



Figure 6: Bayport Chert Utilized/Edge-damaged Flake and Flakes.



Figure 7: Quartzite Flakes.

Historic Period Artifacts

Sixty-six Historic Period items were recovered during the project, 52 of which are fragments of asphalt shingles. Other historic items include a red, 2-hole, plastic or rubber button (Figure 8, #37), one small fragment of red brick, a piece of concrete, six clear glass vessel fragments, two corroded iron nails, one scrap of corroded wire, one composite floor tile fragment, and one saw-cut large mammal bone (Figure 8, #94). The nails include one square and one wire example. Most of the Historic Period items date from the 20th century. The button, brick fragment, saw-cut bone, and square nail could date to the 19th century.



Figure 8: Historic Period Button and Bone.

DISCUSSION AND CONCLUSIONS

Between 20 October and 30 October 2014, archaeologists from the Castle Museum excavated a 10 m X 0.5 m test trench at the Spencer Farm site in Saginaw County, Michigan. The archaeological testing was conducted to ensure that significant archaeological resources would not be damaged by the installation of a drain trench across a portion of the site and to assess the nature of any archaeological deposits that might be present.

Prehistoric material recovered from the site includes cores, flakes, and FCR, none of which are temporally diagnostic. FCR account for over 96% (by count) of the recovered prehistoric artifacts. Their presence indicates that cooking and/or other heating tasks were important at the site. The flake assemblage includes Bayport chert and quartzite examples totaling at most 14 specimens (some are possible flakes that may actually be FCR). One of the Bayport chert flakes is utilized/edge-damaged. The cores include one quartzite and one greywacke specimen. The meagre flaked stone assemblage indicates that some tool manufacturing and maintenance occurred at the site. Some of the charcoal and calcined bone fragments may also be related to the prehistoric component(s), but given the disturbed context from which most were recovered and the possibility that they are a result of natural fires, this cannot be conclusively determined.

Most of the Historic period items recovered in the test trench represent 20th century building construction or maintenance activities, the bulk of which (79%) are asphalt shingles. Other historic items including the wire, bottle fragments, button, and saw-cut bone, are the types of domestic debris one would expect to be scattered around a farm and residential area that had been occupied for multiple generations.

The artifacts and soil profiles observed in the Spencer Farm drain trench test clearly indicate that the ground has been disturbed by plowing, grading or scraping, and filling. The fill observed in the north end of the trench is almost certainly derived from the immediate area, likely from the ditch located between the trench and the road. A few FCR were recovered below the plow zone. These may have been displaced from higher levels by bioturbation, but could indicate the presence of intact archaeological deposits below the plowzone.

The extant farm collection contains artifacts spanning much of the local Prehistoric period going all the way back to Late Paleoindain/Early Archaic times. Because of this, and because FCR were observed near the surface in the initial drain trench excavation, it was deemed prudent and desirable to conduct archaeological testing prior to completion of the drain. The testing confirmed the presence of Prehistoric material in this portion of the Spencer Farm site, but did not find temporally diagnostic material. Other portions of the Spencer Farm site not subject to sand mining in the 1950s have potential to contain intact archaeological deposits. Shovel-testing would be an appropriate means of testing this possibility.

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