

Plan for Scientific Excavations at the Collier Lodge Site (12 Pr 36)

2010 Season

Submitted to the
Indiana Department of Natural Resources,
Division of Historic Preservation and Archaeology

by

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Archaeological Background

Prior Field Work at the Collier Lodge Site

The Collier Lodge site (12 Pr 36), also known as Baum's Bridge, is located on the southern border of Porter County, Indiana on the northern edge of the former Kankakee Marsh. This location was first described as an archaeological site by McAllister (1932) as Porter County site number 36. At the time of McAllister's visit to the site, it was only one of two prehistoric sites in Porter County known to have produced pottery. From McAllister's description of sherds from the site, it is clear that they included grit-tempered Woodland period pottery (1,000 B.C. to A.D. 1100) and a few examples of shell-tempered sherds, an artifact type characteristic of the Upper Mississippian period (ca. A.D. 1100 to historic contact) in northwestern Indiana (Faulkner 1972; Schurr 2003).

The site was used throughout the historic period. Its original historic name was Potawattommie Ford. The first ferry across the marsh in Porter County was established near the site by Sherwood in the 1830s. By 1836, Eaton was operating the ferry. He later attempted to establish a toll bridge in 1849 but it soon burned down and he reverted back to the ferry. Sawyer bought the property in 1857 and also attempted to maintain a bridge, but it was quickly swept away by drift. In 1863, the site was purchased by Baum, who built the first successful bridge across the Kankakee at this location, and the site has since been best known as Baum's Bridge. In 1865, the bridge was taken over by the county. The first hunting club was established in the vicinity in 1878. In 1898, the Collier Lodge was built at the site, and that building, although very deteriorated, is still standing. After Jim Collier's death in 1952, the site passed through the hands of several owners until it was purchased by John Hodson in 2001.

Today the site consists of a grassy lawn containing the Collier Lodge building. Several small outbuildings that stood at the site up until 2006 have since been removed. The site is located on a sandy ridge adjacent to a short segment of the original Kankakee River. A short portion of the channel was isolated as a sort of bayou or slough when the marsh was drained and this segment was bypassed by a drainage ditch to the south. Today, the borders of the old channel segment look much like they must have when the lodge was in use. The site was placed on the National Register of Historic Places on December 24, 2009.

Prior Archaeological Field Work at the Site

The site has been the location of an on-going archaeological project by the University of Notre Dame and the Kankakee Valley Historical Society. Results of prior field investigations from 2003 through 2005 have been reported in a single volume (Schurr 2006). Investigations from 2006 through 2008 were described in the successful National Register Nomination (Schurr and Rotman 2009) approved by the Department of the Interior submitted on December 24, 2009. A complete report of the 2006 through

2009 excavations is now in draft stage. At this time (May 19, 2010), the text has been completely written and the report is in final production (adding figures and overall formatting).

Since 2007, the field work at Collier Lodge has concentrated on defining a very large feature (Feature 25), informally known as the “mega-feature.” The goals of the 2009 season were to reach the bottom of the feature to obtain a full record of the vertical stratigraphy in at least one or two portions of the units running north-south through the feature, and to create one or more east-west profiles of the feature. By the end of the 2009 season, the eastern, northern, and southern limits of Feature 25 had been defined and a single one by one meter unit had determined its maximum depth. The outlines of the feature are show in Figure 1. Figure 2 shows a profile of the southern edge of the feature, including an intact wooden timber found near the base of the feature.

Goals of the 2010 Season

The 2010 excavations will once again focus on Feature 25. Because of the feature’s complexity, excavation will have to be conducted very slowly and will have to be carefully documented (including maps, photographs, and piece plots). The excavation strategies used at Collier Lodge have evolved over time. The first excavations primarily used 2 x 2 m blocks to search for features, supplemented with 1 x 2 m units to test for stratified deposits within specific portions of the site. After the discovery of Feature 1 (the brick fireplace hearth) and the large postmolds associated with it, 1 x 2 m units were used to search for specific features. These in turn led to the discovery of Feature 25, a deep stratified pit suspected of being an early nineteenth century cellar, a suspicion that was strongly reinforced by the 2009 investigations. During the 2008 and 2009 seasons, Feature 25 was investigated by combining 1 x 2 m units to create a trench that cross-sectioned the feature from north to south, with additional units placed to the east and west to create flanking trenches that could be used to determine the size of the feature.

The cross-section approach has proven effective for demarcating the limits of the feature (except on the west, where the feature continues beyond the limits of excavations to date and lies partially under the lodge building). However the complexity of the multiple deposition episodes in Feature 25 mean that each 1 x 2 m unit has a somewhat different profile and set of features, making it difficult to tell exactly how Feature 25 was constructed and then demolished. Instead of excavating successive 1 x 2 m units in combination to maximum depth, it would now be helpful to open a larger block excavation that will expose the entire feature at one time. This can easily be done by opening additional strategically placed 1 x 2 m units and perhaps a few 2 x 2 m units, but only excavating them until the edge of the outline of the feature is visible in the floor (based on profiles, that would typically be at a depth of 25 to 35 cm B.S., or about one level below the topsoil).

Last year we began a collaborative project with Dr. Paul Turner, Manager of Academic Technical Services, University of Notre Dame to evaluate the use of the

Gigapan system for recording excavation profiles. The Gigapan takes multiple panoramic photos in three dimensions that can be stitched together to create high resolution images of unit profile walls that can be explored by panning and zooming. The initial results were very promising. For example, it is possible to zoom in to observe embedded artifacts and even individual sediment grains. Some preliminary images can be seen at <http://gigapan.org/gigapans/49635/> (clicking on the snapshot will zoom in to show a blue transfer print sherd under the bricks of Feature 31). In the future, we need to learn how to take exposures that can be easily stitched into seamless profiles.

The areas where excavations will be conducted in 2010 are depicted in Figure 3. Activities planned for the 2010 season include:

1. Conduct GPR and soil resistivity surveys south of the Lodge and west of the E 80 grid line to see if the western edge of Feature 25 can be detected by those methods.
2. Open units adjacent to previously opened units in order expose the full extent of Feature 25.
3. Extend 1 x 2 m units to the west of the existing excavations to search for the western edge of Feature 25.
4. Remove the backfill from the units in coordinates E 79 - 80 N 83 - 86 to re-expose a full profile of the southern edge of Feature 25. The edge of the feature has been mapped in two separate 1 x 2 m units and it would be easier to interpret the feature if a complete profile could be viewed at one time.
5. Use the Gigapan system with 10 and 20 megapixel cameras using sequential multiple exposures at different exposure compensations to record the profiles of the south edge of Feature 25 to further evaluate the effectiveness of this unique method for recording profiles. A major question is what the appropriate tradeoff is between image quality and file size.
6. If time and labor permits, open additional 1 x 2 m units to the south and east of past excavations to try and determine the distribution of Upper Mississippian pits.

Excavation Procedures

Investigation at the site will begin with the re-establishment of a metric site grid defined in 2003 by reference to several local benchmarks. Horizontal and vertical control of the excavations will be maintained by reference to the grid coordinate system.

Units will be re-opened or placed as necessary to accomplish the season's goals. When a unit is re-opened, the walls and floors will be troweled, and all soil zones and

features will be correlated with maps and photographs showing the appearance of the unit at the end of the 2008 season. All excavation will be done by hand, using either shovels or trowels. The maximum size of any single excavation unit will be 2 meters square (most will be 1 x 2m units). The units will be excavated in either arbitrary levels with a maximum thickness of 10 cm, or in archaeological levels defined by changes in soil color, texture, or artifactual content. Archaeological levels with a thickness greater than 10 cm will be subdivided into arbitrary 10 cm levels to maintain additional stratigraphic control. Soil colors will be described using the Munsell system (1990 edition). All excavated soil will be screened through 1/4 inch hardware cloth, except for soils which appear to contain high concentrations of microbotanical or microfaunal remains. Soils from these contexts will be processed using flotation recovery techniques. Additional soil samples will also be water screened to test whether very small artifacts (such as seed beads or gunshot) are present. Water screening was evaluated in 2006 and 2007 and its use was expanded in 2008 to the extent that some contexts which might contain high densities of small bone fragments (such as fish bone) or important small artifacts (such as trade beads) were completely processed by water screening. The expanded sampling strategy used in 2008 will be employed in 2009. A water screening station will be established in the field so that samples can be processed simultaneously with the excavations and a special tagging system will be employed to track water screen samples. Soil samples will also be collected from each archaeological stratum.

Each archaeological level and feature will be documented using the appropriate form and by scaled maps with a resolution of 0.5 cm. Artifacts with significant spatial relations to each other or to other features will be piece-plotted. All artifacts collected will be recorded in a field specimen log to maintain associations between specimens and their archaeological contexts. A Brick Record log will be used to record the locations and attributes of large brick fragments. Digital images (≥ 8 megapixels) will be supplemented with color slides and black and white photographs to document the excavations and a log book of all excavation photographs will be maintained. The completed field records and the photographs will be curated at the Archaeology Laboratory, University of Notre Dame. All artifacts collected during the excavation will be processed, catalogued, and will also be curated at the Archaeology Laboratory along with their associated documentation where they will be used for research and teaching.

It is now estimated that a maximum total area of approximately 10 m^2 will be excavated over the course of the project. At the conclusion of the excavation, all units will be backfilled and the site contours will be stabilized to prevent erosion. The methods used in the field investigation will meet or exceed the standards described in Department of Natural Resources 312 IAC 22.

The scientific investigation will be conducted between July 6 and August 28, 2010. The bulk of the excavations will be conducted between July 6 to 22. We are requesting that the permit be extended to August 28 because the Kankakee Valley Historical Society (KVHS) will be sponsoring the Auikiki River Festival that weekend. The festival will include a variety of events, including a demonstration of archaeological

field methods and informal lectures on archaeology and historic preservation to be conducted by the P.I., who will finish the 2010 field season with one day of work during the festival on what is sure to be an uncompleted unit from earlier in the summer. Last year's demonstration consisted primarily of using open profiles to explain concepts of stratigraphy and the importance of archaeological contexts. Festival attendants who were not able to visit the site during the normal season will be able to see an archaeological unit, observe hand excavation, and learn about data recording. Information about historic preservation in Indiana will also be provided.

Personnel for the project will consist of volunteers from the KVHS and field school students enrolled in Notre Dame's Archaeology Field School course (at this time, six students are registered for the class). The excavations will be directed by Dr. Mark R. Schurr. He has extensive experience in Indiana archaeology and human osteology (vita attached). Experienced and qualified KVHS members will serve as unit leaders. Field school students will be trained to manage excavation units. Inexperienced KVHS members will be paired with more experienced people. They will begin by assisting with screening, flotation, water screening, and artifact processing, and will take on additional tasks as they are trained. All artifacts will be cleaned and receive an initial sorting in the field lab at the site. A faunal identification workshop will be conducted by Dr. Terrance J. Martin, Illinois State Museum and demonstrations of the Gigapan system will be provided by Dr. Paul Turner.

A report of the results of the excavation along with an amended copy of the state archaeological inventory form for the site will be submitted to the Division of Historic Preservation and Archaeology one year after the excavations are completed. Further reports describing laboratory analysis of cultural and biological materials from the site will be submitted as these analyses are completed.

Statement on Human Burials

McAllister (1932) reported that several burials were found in the "immediate vicinity" of the site prior to 1931. Their cultural affiliation is unknown but it is assumed they were prehistoric. Local oral history holds that burials were found under the area of a porch on the Lodge. Based on a picture of the Lodge dating to the early twentieth century, the burials may have come from the river bank along the western edge of the lodge. This area is now heavily overgrown with vegetation and will not be investigated during the project.

The collection of human bone is not a goal of the project and all reasonable attempts will be made to avoid disturbing human burials. If human bone is accidentally encountered during excavation, all work in the excavation unit containing the bone will be immediately halted, and the Division of Historic Preservation and Archaeology will be notified within two working days. Any human remains encountered will be treated in accordance with IC 14-21-1 and 312 IAC 22. We would then prefer to conduct the

minimum amount of excavation necessary to determine the age and cultural affiliation of the burial (i.e., does it represent a prehistoric burial or a recent forensic case?), to document these findings, and to then cover the burial with soil and preserve it *in situ*. The landowners of each site have also requested that any burials that are accidentally encountered be preserved.

References Cited

Faulkner, C. H.

1972 *The Late Prehistoric Occupation of Northwestern Indiana: A Study of the Upper Mississippian Cultures of the Kankakee Valley*. Prehistory Research Series Vol. 5(1). Indiana Historical Society, Indianapolis, Indiana.

Hall, R. L.

1962 *The Archaeology of Carcajou Point: With an Interpretation of the Development of the Oneota Culture in Wisconsin*. University of Wisconsin Press, Madison, Wisconsin.

Brown, J. A. (ed.)

1990 The Oak Forest Site: Investigations into Oneota Subsistence-Settlement in the Cal-Sag Area of Cook County, Illinois. In *At the Edge of Prehistory: Huber Phase Archaeology in the Chicago Area*. Edited by J. A. Brown and P. J. O'Brien. pp. 123-308. Center for American Archaeology, Kampsville, Illinois.

McAllister, J. G.

1932 The Archaeology of Porter County. *Indiana History Bulletin* 10(1).

Schurr, Mark R.

2003 The Late Prehistory of Northwestern Indiana: New Perspectives on an Old Model. In *Facing the Final Millennium: Studies in the Late Prehistory of Indiana, A.D. 700 to 1700*. Edited by Brian G. Redmond and James R. Jones, III. pp. 4-31. Special issue of *Indiana Archaeology*, Division of Historic Preservation and Archaeology, Department of Natural Resources, Indianapolis.

2006 *Archaeological Investigations of the Collier Lodge Site (12 Pr 36)*. University of Notre Dame Archaeology Laboratory Report of Investigations 2006-1. Notre Dame, Indiana.

Secunda, W. B., M. R. Schurr and M. Pribbernow

2002 *Investigations of Historic Potawatomi Villages in Northern Indiana*. Archaeology Laboratory, Report of Investigations 2002-1. Department of Anthropology, University of Notre Dame, Notre Dame, Indiana.

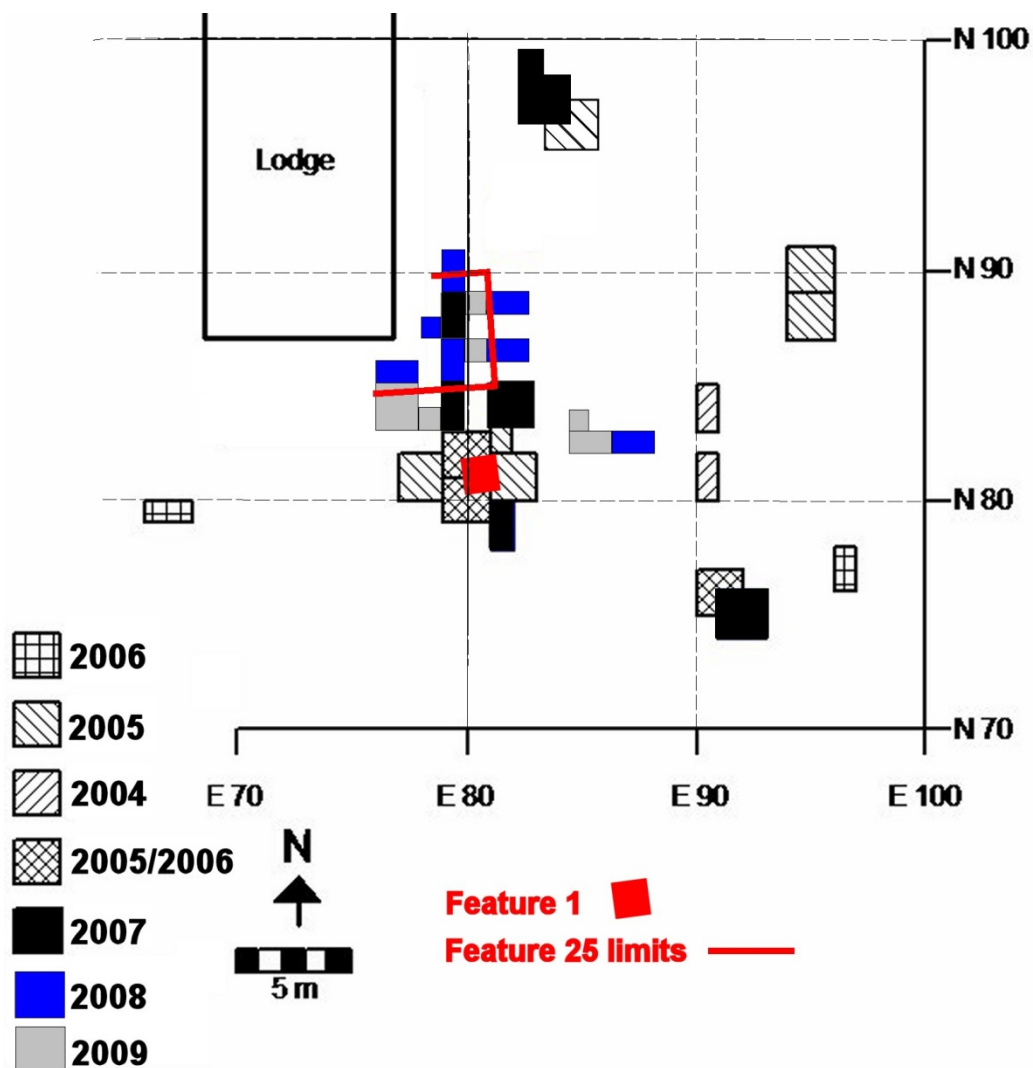


Figure 1: Locations of excavation units from prior seasons and Feature 25.



Figure 2. Stratigraphy of the south edge of Feature 25 with wooden support timber (Feature 35).

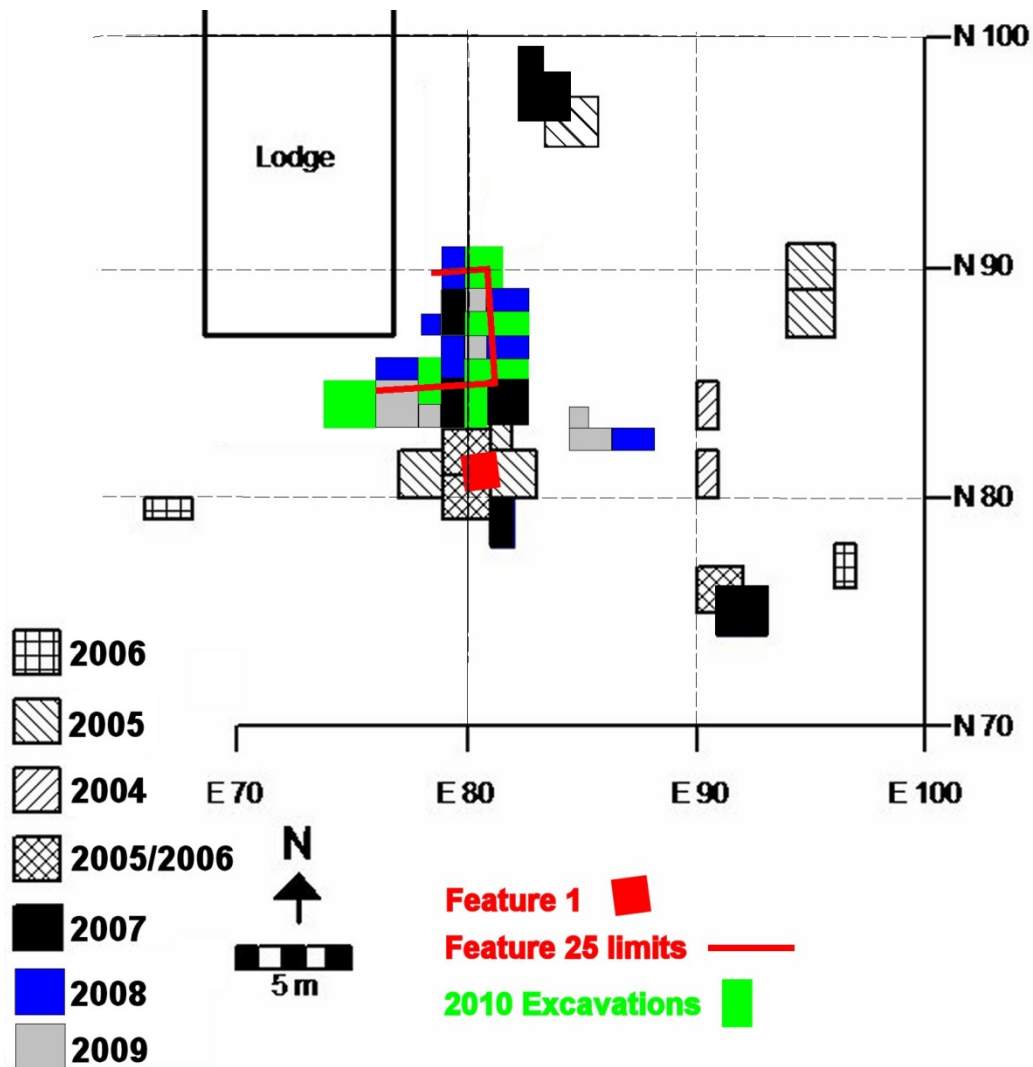


Figure 3. Potential excavation locations for the 2010 season.