

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

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

by

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Site Background

The Collier Lodge site (12 Pr 36), also known as Baum's Bridge, is located in on the southern border of Porter County, Indiana on the northern edge of the former Kankakee Marsh (see enclosed Indiana State Archaeological Site Inventory form). 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 were shell-tempered, an artifact type characteristic of the Upper Mississippian period (ca. A.D. 1100 to historic contact) in northwestern Indiana (Faulkner, 1973; Schurr, 2003).

Today the site consists of a grassy lawn containing the Collier Lodge and several small outbuildings. 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 Kankakee Valley Historical Society (KVHS) has the restoration and interpretation of the Collier Lodge and its environs as its primary goals. In order to assist the KVHS in the management of archaeological resources at the property, the University of Notre Dame Archaeological Field School conducted a Phase 1 investigation of the site on June 12 and 13, 2003. The investigations were conducted under DHPA permit #200235 and were originally scheduled to span two days, but were cut short by rain after a day and a half. The field work was open to the public and gathered much favorable media attention for historic preservation and archaeology. Figure 1 shows the locations of the field activities and results in relation to site landmarks.

During the 2003 investigations, a site grid was established and tied to a high-quality map of the site that had been prepared recently by a professional surveyor. A gradiometer was used to make a geomagnetic survey over an area of 350 m². The results of the geophysical survey clearly revealed the foundation of a building that once stood at the site to the east of the lodge (Figure 2) and many strong bi-polar magnetic anomalies characteristic of iron, an expected result for a densely occupied historic site. Shovel probes were placed across major axes of the site at 5 m intervals. Three lines of probes were completed, (Figure 1). The contents of all shovel probes were screen through ¼ inch mesh screens and all soil profiles were recorded. More extensive shoveling probing of the site had been planned, but could not be completed because of rain. But more significantly, several of the probes were extremely deep and therefore required much more time than expected to complete. For example, one probe was excavated to a depth of 60 cm and was found to still contain cultural deposits but could not be deepened because there was not enough room to maneuver the shovel within the hole. A one inch soil coring probe placed into the probe floor revealed that cultural deposits probably

extended to a depth of about 1 m below surface in this portion of the site. Such deep cultural deposits are rarely encountered in northwestern Indiana. While they were not expected, they were an extremely welcome surprise.

The shovel probes produced an unusually rich archaeological assemblage. In addition to the expected modern or recent items such as fragments of asphalt shingles, round nails, bottle caps, and various bits of plastic, historic ceramics dating as early as A.D. 1780 - 1830 (for a rim sherd from a blue-edged pearlware plate) were also collected. This style of rim is characteristic of the Removal/Pioneer period in the region when Euroamericans were rapidly displacing Native Americans during the early portion of the nineteenth century (Secunda, et al. 2002).

Upper Mississippian sherds were found in several of the shovel probes, including one very large rim sherd with an everted rim and broadly trailed decorations that is similar to the types Koshoning Bold (Hall 1962) or Fifield Bold (Faulkner 1972), a style characteristic of the early Upper Mississippian period prior to about A.D. 1300. The recovery of such a large sherd (approximately 10 cm wide) suggests that prehistoric features may be present at the site.

Shovel probes with deep cultural deposits showed that portions of the site were stratified, with historic artifacts within the top 20 to 30 cm of the soil lying over prehistoric sherds, flakes, and fire-cracked rock. It is possible that archaeological deposits predating the Upper Mississippian could be present at the site, but this could not be confirmed because the one inch soil probes into the shovel probe floors did not recover any diagnostics (as expected for such a small diameter probe). The site thus has the potential to contain a stratified deposit dating to the Late Woodland or even earlier, a highly unusual occurrence on the easily eroded sandy soils along the Kankakee.

The types of artifacts and their distributions are still being studied. A preliminary analysis of artifact distributions and soils found in the probes suggests that the prehistoric occupations are concentrated in a midden area now documented to span a roughly circular area at least 15 m in diameter (Figure 1). However, the eastern limits of the midden were not determined, so it could cover a larger area. At the time of the 2003 investigations, the area to the east of the shovel probes was owned by a landowner who was not affiliated with the KVHS. That property is now owned by a society member so it will be possible to extend the shovel probes to the east. Removal Period artifacts were concentrated in a small area on the eastern edge of the site (Figure 1) and could also extend further to the east. Late nineteenth and twentieth century artifacts are ubiquitous.

Bone preservation at the site was exceptionally good. Taxa preliminarily identified in the faunal assemblage include both large and small mammals, reptiles, birds, and fish, with many fragments appearing to have come from prehistoric contexts. Charcoal pieces and fragments collected during screening show that the deposits also contain botanical evidence about past activities at the site, and that flotation recovery

techniques would be profitable. While large pieces of wood charcoal were also collected, many coal fragments are present, and they make radiocarbon dating difficult.

Based on the very brief 2003 investigations, the Collier Lodge site has a very strong potential to contain intact archaeological deposits dating to the Upper Mississippian period, and perhaps to earlier and later periods as well.

Proposed Investigations

Further investigations are proposed at the site to better delineate the spatial extent and character of the archaeological deposits found there. The ultimate purpose will be to determine if intact cultural deposits that would make the site eligible for the State and National Registers are present. The investigations proposed for 2004 will be designed to:

1. Extend the geophysical surveys to the south and east of the area covered in 2003, and to include resistivity surveys in addition to magnetic ones.
2. Gather additional transit data to accurately map features present at the site not yet incorporated into the site map (such as an outhouse, other outbuildings, vegetation, and local topography).
3. Continue the shovel probing grid at 5 m intervals as necessary to determine the spatial limits of the site.
4. Conduct limited test excavations to assess the depth, degree of stratification, and dates of archaeological deposits in the midden area of the site.

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.

Geophysical surveys will be conducted in appropriately placed grid units to the south and east of the area surveyed in 2003. Grids will be shaped and placed as necessary to avoid obstacles. Shovel probes will be placed across the site in 5 m intervals until three successive probes in a line detect culturally sterile deposits. Test excavations will then be conducted to test hypotheses about feature distributions developed from the geophysical data and to assess the depth and integrity of midden deposits. 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. 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). 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. Color slides and black and white photographs will be taken to document the excavations and a log book of all excavation photographs will be maintained. Standard film photographs will be supplemented with digital images. 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 m² 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 May 24 and July 2, 2004. Personnel for the project will consist of a field crew of students enrolled in the Archaeology Field School at the University of Notre Dame. The excavations will be directed by Dr. Mark R. Schurr. He has extensive experience in Indiana archaeology and human osteology (vita attached). The Field School will be assisted by members of the KVHS. They will receive an orientation session in early May to prepare them for the basics of work at an archaeological site. KVHS members will be paired with student teams. They will begin by assisting with screening, flotation, and artifact processing, and will take on additional tasks as they are trained.

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

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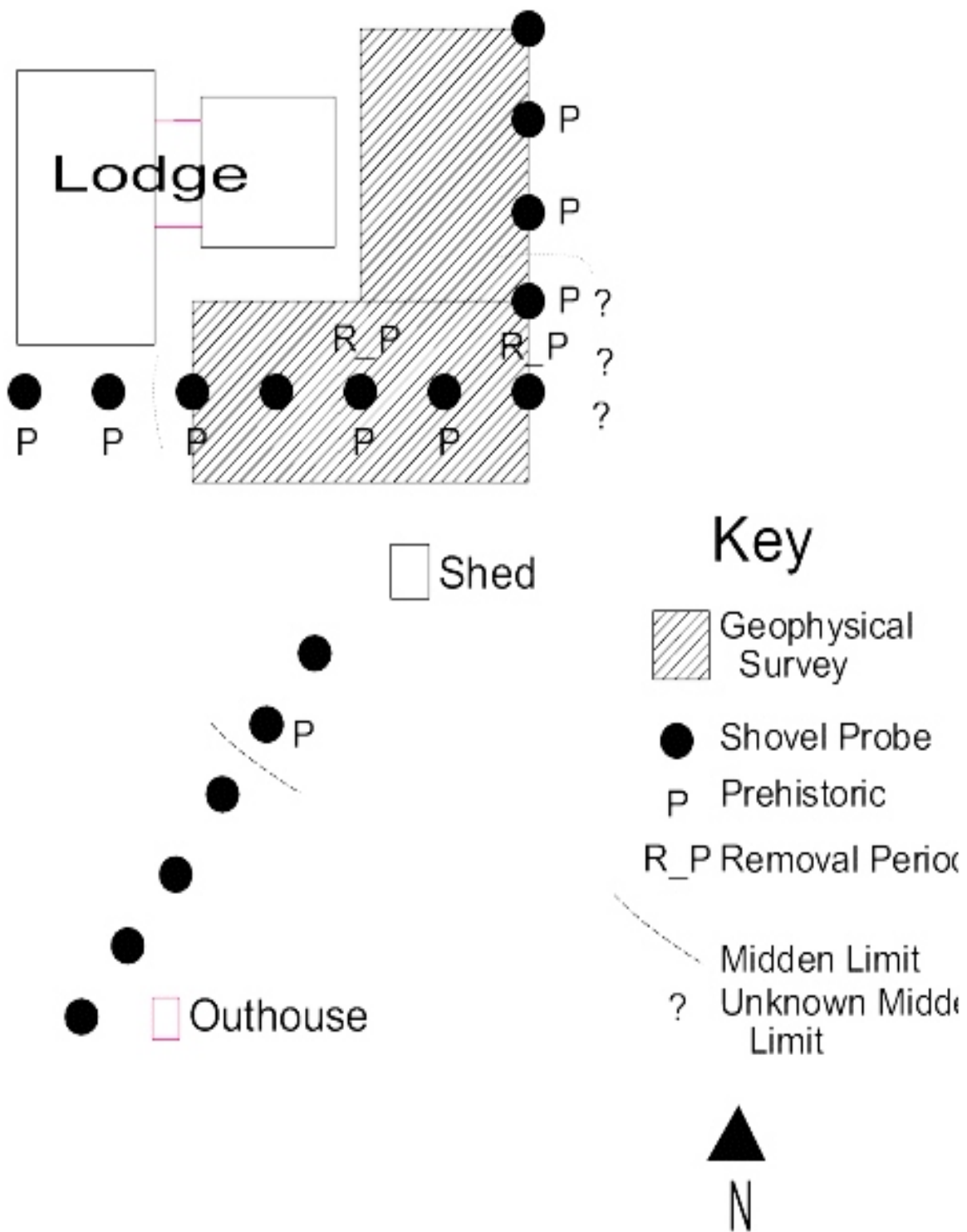


Figure 1. The 2003 investigations

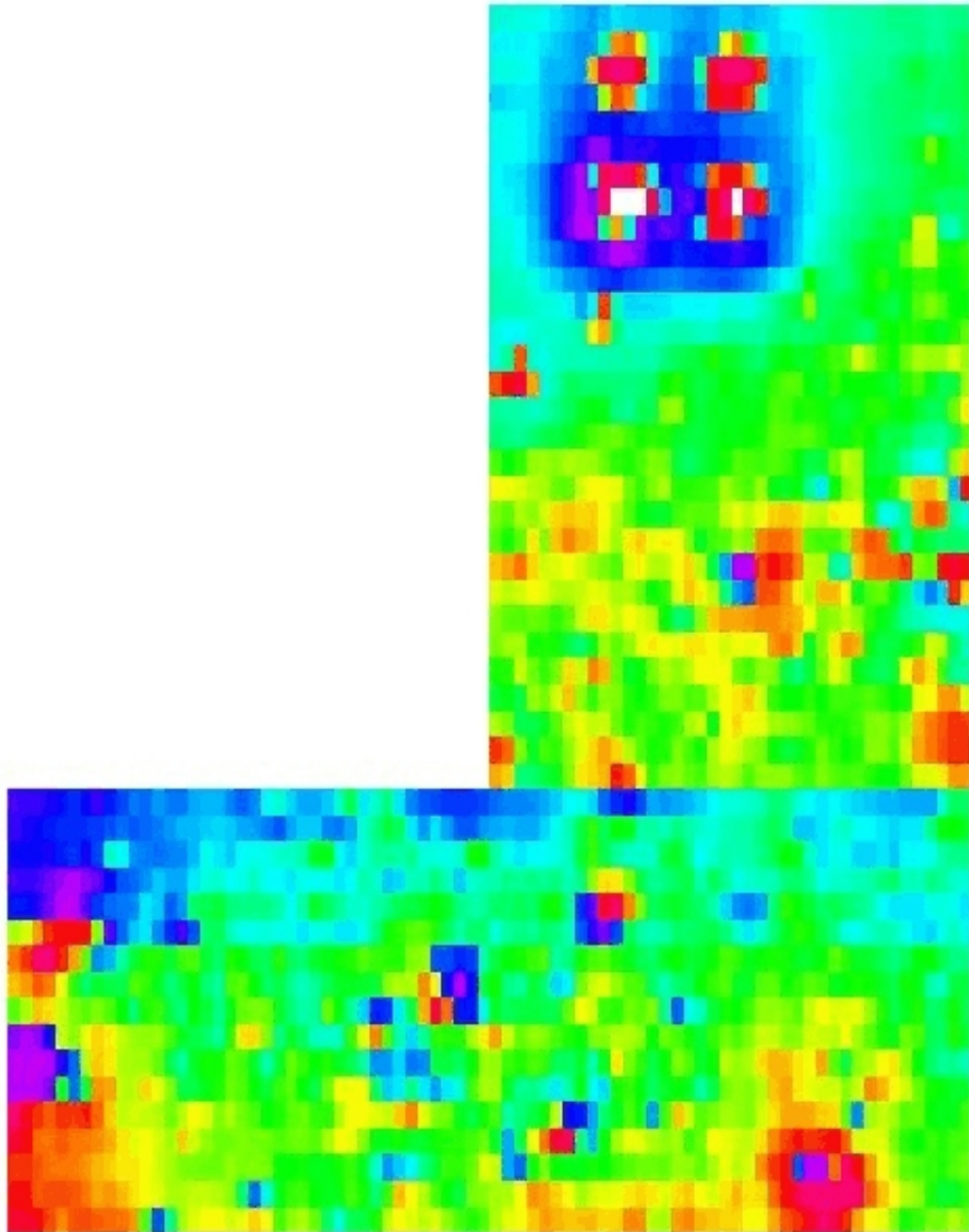


Figure 2. Geomagnetic survey map, 2003.