Geophysical Surveys and Excavations at the Collier Lodge Site

(12PR36)

2010 Season

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Abstract

The 2010 season of archaeological investigations at the Collier Lodge site (12PR36) in Porter County, Indiana was a continuation of the investigations that have been occurring there since 2003. The investigations were a cooperative project between the University of Notre Dame and the Kankakee Valley Historical Society. The 2010 investigations were conducted between July 5 and 22, 2010 with a single additional day of excavation on August 28, 2010 during the Aukiki River Festival. The excavations were conducted under permit #20100019.

During the field season, seven units with a total surface area of 16 m² were opened, sampling about 1.7 percent of the 960 m² core area of the site midden as defined by soil resistivity surveys and shovel probes. The excavation units contained six features that had not been previously defined. These consisted of three Upper Mississippian roasting pits, one prehistoric pit that produced shell/grit tempered pottery from its upper fill, and two trenches that were determined to be associated with a late twentieth century garage floor. Additional investigations were conducted on three features that had been defined in earlier seasons. These included Feature 25 (an historic cellar pit), Feature 30 (an early twentieth century trash pit), and Feature 33 (a bark-lined pit that may have been used for mixing plaster during the late nineteenth or early twentieth century). A small ground-penetrating radar (GPR survey) located the paths of two sewer pipes south of the Lodge building.

In summary, the 2010 investigations confirmed the eastern edge of Feature 25 but failed to find its southwest corner because of historic disturbances. Two new Upper Mississippian pits were investigated.
Acknowledgements

Archaeological fieldwork is teamwork. It would not have been possible to conduct such a successful project over several seasons without the assistance of many committed and dedicated people. It is not possible for me to list by name the hundreds who have given their time and interest to the project but that does not mean that I am grateful for the help of each and every one of them, and for the interest shown by the many people who simply dropped by to see what we were up to.

The Kankakee Valley Historical Society has been absolutely essential to the project. KVHS members have done the majority of the field work and artifact processing. All of this was ably organized by John Hodson, the society’s president. Judy Judge helped organize the archaeological project, excavates, and provided absolutely invaluable assistance, along with countless hours of labor processing and cataloging artifacts. Students from Notre Dame’s Archaeology Field School also participated in the excavations. They included Jessica Bock, Elisabeth Jarzen, Laura Mittelstaedt, Caitlin Monesmith, Jim Morris, and Drew Webster. They all contributed to the excavation descriptions.
# Table of Contents

Abstract .......................................................................................................................... 1
Acknowledgements ......................................................................................................... 2
Introduction .................................................................................................................... 7
Prior Fieldwork at the Collier Lodge Site................................................................. 7
The 2010 Investigations ............................................................................................... 8
Excavation Procedures ............................................................................................... 9
Results of the Investigations ....................................................................................... 9
Ground-Penetrating Radar (GPR Survey) ............................................................. 9
Excavations .......................................................................................................... 10
  Exploration of Upper Levels of Feature 25 ...................................................... 10
    Unit E 79-80 N 86-87 .................................................................................... 11
    Unit E 80-81 N 86-87 .................................................................................... 13
  Continuing the Search for the Western Extension of Feature 25...................... 14
  Continued Exploration of the Eastern Edge of Feature 25 ............................... 18
    Unit E 81-83 N 85-86 .................................................................................... 18
    Unit E 81-83 N 87-88 .................................................................................... 25
  Searching for the Northeast Corner of Feature 25 at E 80-82 N 89-91 .......... 31
  Exploration of Upper Mississippian Roasting Pits ........................................... 31
Summary of Features ........................................................................................... 41
  Prehistoric Features........................................................................................ 41
  Historic Features ............................................................................................ 41
The Artifact Assemblage ....................................................................................... 43
  Laboratory Procedures ......................................................................................... 43
  Prehistoric Artifacts ............................................................................................. 44
   !Prehistoric Ceramics ......................................................................................... 44
    Prehistoric Lithic (Stone) Artifacts .................................................................. 46
      Scrapers .......................................................................................................... 49
        Pieces Esquillés .......................................................................................... 49
      Drills .............................................................................................................. 49
    Projectile Points and other Refined Bifaces .................................................. 49
      Triangular Points .......................................................................................... 49
      Stemmed Points ......................................................................................... 49
        Expanding Stemmed Points .................................................................. 50
        Intermediate Forms ............................................................................... 50
  Historic Artifacts.................................................................................................. 50
    Historic Ceramics .......................................................................................... 50
      Ware Types ................................................................................................... 50
        Fine Earthenwares ................................................................................... 50
          Decorated Fine Earthenwares .................................................................. 51
        Coarse Earthenwares .............................................................................. 56
        White Clay Pipes ................................................................................... 57
      Glass .............................................................................................................. 58
      Flat (Window) Glass ................................................................................... 59
  Container and Other Glass .............................................................................. 59
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal</td>
<td>63</td>
</tr>
<tr>
<td>Brick and Mortar</td>
<td>65</td>
</tr>
<tr>
<td>Faunal and Floral Remains</td>
<td>66</td>
</tr>
<tr>
<td>Faunal Remains</td>
<td>66</td>
</tr>
<tr>
<td>Worked Bone and Shell</td>
<td>66</td>
</tr>
<tr>
<td>Floral Remains</td>
<td>66</td>
</tr>
<tr>
<td>Rocks and Minerals</td>
<td>66</td>
</tr>
<tr>
<td>Conclusions</td>
<td>67</td>
</tr>
<tr>
<td>References Cited</td>
<td>70</td>
</tr>
</tbody>
</table>
List of Figures

1 Site Map with Prior Excavations and Other Features ..................................................... 8
2 Example of a GPR Transect .......................................................................................... 10
3 Unit E 79-80 N 86-87 Level 7 Floor ........................................................................... 11
4 Unit E 79-80 N 86-87 Level 9 Floor ........................................................................... 12
5 Unit E 80-81 N 86-87 Level 7 Floor ........................................................................... 13
6 Unit E 80-81 N 86-87 Level 7 Floor Map .................................................................. 14
7 Unit E 74-76 N 83-85 Level 3 Floor ........................................................................... 15
8 Unit E 74-76 N 83-85 Level 4 Floor ........................................................................... 15
9 Unit E 74-76 N 83-85 Level 4 Floor Map .................................................................. 16
10 Unit E 74-76 N 83-85, Level 6 Floor .......................................................................... 17
11 Unit E 74-76 N 83-85, Level 9 Floor .......................................................................... 17
12 Unit E 81-83 N 85-86 Level 2 Floor .......................................................................... 19
13 Unit E 81-83 N 85-86 Level 3 Floor .......................................................................... 20
14 Unit E 81-83 N 85-86 Level 3 Floor Map .................................................................. 21
15 Unit E 81-83 N 85-86 Level 5 Floor .......................................................................... 22
16 Unit E 81-83 N 85-86 Level 5 Floor Map .................................................................. 23
17 Unit E 81-83 N 85-86 Level 6 Floor .......................................................................... 24
18 Unit E 81-83 N 87-88 Level 3 Floor .......................................................................... 26
19 Unit E 81-83 N 87-88 Level 3 Floor Map .................................................................. 27
20 Unit E 81-83 N 87-88 Level 5 Floor .......................................................................... 28
21 Unit E 81-83 N 87-88 Level 5 Floor Map .................................................................. 29
22 Unit E 81-83 N 87-88 Level 7 Floor .......................................................................... 30
23 Unit E 81-83 N 87-88 Level 7 Floor Map .................................................................. 31
24 Unit E 80-82 N 89-91 Level 3 Floor .......................................................................... 32
25 Unit E 80-82 N 89-91 Level 3 Floor Map .................................................................. 33
26 Unit E 80-82 N 89-91 Level 6 Floor .......................................................................... 34
27 Unit E 80-82 N 89-91 Level 6 Floor Map .................................................................. 34
28 Unit E 80-82 N 89-91 Level 7 Floor .......................................................................... 35
29 Unit E 84-86 N 92-94 Level 4 Floor .......................................................................... 37
30 Unit E 84-86 N 92-94 Level 4 Floor Map .................................................................. 38
31 Unit E 84-86 N 92-94 Level 6 Floor .......................................................................... 39
32 Feature 43 in Profile in the South Wall of Unit E 82-84 N 92-94 .............................. 39
33 Feature 43 in Profile in the South Wall of Unit E 82-84 N 92-94 Map .................... 40
34 Prehistoric Rim Sherds ............................................................................................ 45
35 Lithic Artifacts ......................................................................................................... 48
36 Relative Ware Weights ............................................................................................. 51
37 Nineteenth Century Historic Ceramic Decorations .................................................. 52
38 Hand Painted Sprig and Annular Decorations ......................................................... 53
39 Late Nineteenth Century Decorations ...................................................................... 53
40 Late Nineteenth and Twentieth Century Decorations ............................................. 54
41 Red and Gray Paste Coarse Earthenwares ................................................................. 56
42 Large Coarse Earthenware Sherds ........................................................................... 57
43 White Clay Pipe Fragments ....................................................................................... 58
44 Glass Artifacts .......................................................................................................... 62
List of Figures, Continued

45 Buttons ............................................................................................................... 62
46 Interesting Metal Artifacts ................................................................................ 64
47 Triangular Mark on Hand Struck Brick ............................................................... 65

List of Tables

1  Units Excavated in 2010 ...................................................................................... 10
2  Features Defined in 2010 ..................................................................................... 42
3  Prehistoric Pottery Abundances by Surface Treatment and Decoration .......... 44
4  Decorated Prehistoric Sherds ........................................................................... 46
5  Prehistoric Chipped Stone Artifacts ................................................................ 47
6  Chipped Stone Bifaces and Fragments ............................................................. 48
7  Fine Earthenware Abundances ........................................................................ 51
8  Fine Earthenware Decorations and Dates ......................................................... 54
9  Paste Colors of Coarse Earthenwares ............................................................... 57
10 Flat Glass Colors ................................................................................................ 59
11 Types of Glass Artifacts .................................................................................... 60
12 Non-Flat Glass Colors ....................................................................................... 61
13 Metal Abundances ............................................................................................. 63

List of Appendices

1. Field Specimen Numbers
2. Prehistoric Ceramics
3. Lithics
4. Fine Earthenwares and Porcelain
5. Coarse Earthenwares
6. Glass
7. Metal
8. Brick, Mortar and Plaster
9. Faunal Remains
10. Charcoal, Coal and Clinkers
11. Rocks and Minerals
Introduction

The Collier Lodge site (12PR36), 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 Potawattomie Ford. The first ferry across the marsh in Porter County was established near the site by Sherwood in the early 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 draft report of the 2006 through 2009 excavations was reviewed by DHPA in 2010 and a revised report (dated May 26, 2011) has been submitted to DHPA. A report on the 2010 investigations will be submitted by August 28, 2011.

Since 2007, the field work at Collier Lodge has concentrated on defining a very large feature (Feature 25), informally known as the “mega-feature.” In 2009, the northern limit of the feature and its depth at the southern end were determined, and an unsuccessful attempt was made
to determine its western limit. The goals of the 2010 season were primarily designed to further explore the limits of Feature 25.

**The 2010 Investigations**

Figure 1 shows the locations of the various excavations that have been conducted through the years along with other features such as historic metal scatters and former buildings that are no longer present.

![Figure 1. Site Map with Prior Excavations and Other Features.](image)
Excavation Procedures

Investigations in each field season always began 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 were maintained by reference to the grid coordinate system.

All excavation was done by hand, using either shovels or trowels. The maximum size of any single excavation unit was 2 meters square. The units were 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 were subdivided into arbitrary 10 cm levels to maintain additional stratigraphic control. Soil colors were described using the Munsell system (Munsell Color 1990). All excavated soil was screened through 1/4 inch (0.6 cm) hardware cloth, except for soils that appeared to contain high concentrations of microbotanical or microfaunal remains. Soils from these contexts were processed using flotation recovery techniques. Additional soil samples were also water screened to test whether very small artifacts (such as seed beads or gunshot) were present. Soil samples were collected from some archaeological strata. Each archaeological level and feature was 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 were piece-plotted. All artifacts and samples collected were recorded in a field specimen log to maintain associations between specimens and their archaeological contexts. Digital images were captured to document the excavations. The completed field records and the images are curated at the Archaeology Laboratory, University of Notre Dame. All artifacts collected during the excavation were processed, catalogued, and curated at the Archaeology Laboratory along with their associated documentation where they will are used for research and teaching.

At the conclusion of the excavation, all units were backfilled and the site contours were stabilized to prevent erosion. The floors and walls of any incomplete units were covered with black 6 mil polyethylene before backfilling so that the unit could be reestablished in future. Methods used in the field investigation met or exceeded the standards described in Department of Natural Resources 312 IAC 22.

Results of the Investigations

Ground-Penetrating Radar (GPR Survey)

A small area (266 m²) was investigated using a 500 mHz antenna. Radar profiles were collected at 0.5 m intervals in a block defined by the grid coordinates E 68-87 N 74-88. A typical profile from the survey is shown in Figure 2. All of the reflectors visible in the plot are very shallow, with most being very near the surface and the deepest appearing at about 45 – 50 cm below surface (BS). The reflectors are probably small pieces of metal, most likely iron. The prominent hyperbolic signals between about 10 and 13 m from the left edge of the transect retain their positions across the survey area. They probably mark the path of the lead pipes from Lodge sewer system.
Excavations

Figure 1 shows the placement of units across the site from all excavation seasons and their locations clearly show that some areas of the site were returned to over several years to work out features or answer questions that could not be resolved in a single season. Table 1 lists the 2010 units.

Table 1. Units Excavated in 2010

<table>
<thead>
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<th>Unit</th>
<th>Levels</th>
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<tr>
<td>E 74-76 N 83-85</td>
<td>01 – 09</td>
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<td>E 79-80 N 86-87</td>
<td>06 – 09</td>
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<tr>
<td>E 80-81 N 86-87</td>
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<td>E 80-82 N 89-91</td>
<td>01 - 07</td>
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<tr>
<td>E 81-83 N 85-86</td>
<td>01 – 08</td>
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<tr>
<td>E 81-83 N 87-88</td>
<td>01 - 07</td>
</tr>
<tr>
<td>E 84-86 N 92-94</td>
<td>01 - 11</td>
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Exploration of Upper Levels of Feature 25

Units E 79-80 N 86-87 and E 80-81 N 86-87 were first opened in 2008. They were re-opened in 2010 when excess labor was available. Feature 25 is very difficult to investigate because it is almost 2 m deep and contains a great abundance of artifacts, especially early twentieth century trash in the upper levels, and numerous brick fragments within and below Feature 31 (a dense scatter of brick fragments within Feature 25). The combination of a deep feature and abundant artifacts makes it very difficult to expose much of the feature in any
excavation season. The 2010 excavations were primarily intended remove some of the upper layers of Feature 25 to prepare the area for deeper excavations in future seasons.

Unit E 79-80 N 86-87

Excavation of Unit E 79-80 N 86-87 began by re-establishing the Level 5 floor originally defined in 2008. The floor was uneven with a strong downward slope from the southwest to the southeast and consisted of brick fragments in a matrix of soil that contained numerous charcoal flecks. During the excavation, the location and weight of each brick fragment with a measurable dimension (length, width, thickness) was recorded on a brick record form. Brick fragments without measurable dimensions but greater than ½ inch in size were weighed and discarded on site. Brick fragments became less abundant through Level 6 (a 10 cm arbitrary level). By the Level 6 floor, only a single brick fragment remained within a matrix of dark brown (7.5 YR 3/2) soil that contained a few large fragments of charcoal. The total weight of brick fragments greater than ½ inch (1.3 cm) from the level was 3.05 kg.

The Level 6 floor was still sloped, so Level 7 was excavated to create a level floor at the lowest point reached during the 2008 excavations (which was conveniently about 9 cm below the top of the highest point of the Level 7 floor). Brick fragments continued to diminish. Large sherds from a redware crock with yellow glaze were removed as a piece plot (Figure 3). A relatively large brick fragment looked as if it had been placed or tossed on top of the sherds, perhaps to break them further when they were discarded. The level floor was very sandy dark yellowish brown (10 YR 3/4) soil that was slightly lighter in color in the northern quarter of the unit.

Figure 3. Unit E 79-80 N 86-87 Level 7 Floor.
Because of the very sloped floor, there was no Level 8 in this unit comparable in elevation to the Level 8 that had been removed from the unit in 2008. The next level was therefore designated Level 9, a 10 cm arbitrary level. The soil in the entire level was similar to that of the upper surface. The most notable change was that brick fragments once again became more abundant, especially in the southwest corner where bricks in the floor could be seen as part of brick concentration in the western wall of the unit. Based on the excavation of Unit E 79-80 N 85-86 (Schurr 2011) brick concentrations at various depths are characteristic of the Feature 25 deposits below the more continuous brick fragments of Feature 31. Artifacts from the level such as redware and blue transfer printed sherds seemed more characteristic of the nineteenth century, suggesting that the unit had reached depths below those using for trash disposal in the twentieth century. The level floor (Figure 4) consisted of relatively homogenous brown to dark brown (10 YR 4/3) soil with charcoal flecks that contained some brick fragments and historic pottery sherds that were removed as piece plots. A round patch of mixed soil (red [2.5 YR 4/8] flecked with charcoal and mottled with darker dark reddish brown [5 YR 3/3] soil) was present near the northwest corner of the otherwise homogenous floor. At this point, excavations were ended for the year and the unit was lined with plastic and backfilled.

Figure 4. Unit E 79-80 N 86-87 Level 9 Floor.
Unit E 80-81 N 86-87 was adjacent to E 79-80 N 86-87. It had been opened in 2009 when six levels were excavated. It was opened again in 2010 to create an east-west exposure across the eastern edge of Feature 25. The 2009 Level 6 floor was re-established and the three soil zones that had been mapped were redefined. These consisted of the eastern edge of Feature 30 (an early twentieth century trash pit), a mottled zone of sandy soil (Zone H), and an area of darker soil with brick fragments (Zone F, possibly Feature 25). Because the elevation of the Level 6 floor was about 10 cm above the Level 9 floor of E 79-80 N 86-87, Level 7 was excavated to create a level floor across the two adjacent units. The level was excavated during the Aukiki River Festival on August 28, 2010 to provide a demonstration of excavation for the festival-goers. Each zone mapped at the top of the level was removed separately. Feature 30 disappeared after about 5 cm. The area under Feature 30 was removed separately but it appeared very similar to Zone H, indicating that Feature 30 intruded into the Zone H portion of Feature 25. Zone F persisted through the level. By the level floor (Figure 5), it was well defined against a rather complicated mixture of soil patches in the northeast corner of the unit but its eastern border was more difficult to see in the southern half of the unit, where it is mainly detectable as softer sand with more small roots, compared to the firmer soil of Zone H. The patches of the soil in the northeast corner were visible in the unit wall above the floor. They appear to represent mixed fill within a small pit that intruded into Feature 25 that was not visible at the top of the level but that became well-defined by the bottom of it. As only one day was available for the excavation and much of the day was spent talking to the public, just the one level was completed. The unit was lined with plastic and backfilled after the Festival.

Figure 5. Unit E 80-81 N 86-87 Level 7 Floor.
Continuing the Search for the Western Extension of Feature 25

Unit E 74-76 N 83-85 was opened as a new unit to search for the western edge of Feature 25 (the cellar). The unit was placed south of the lodge along the back porch, with its northern wall defined by a concrete step. Since previous units to the east had failed to define the western border of Feature 25, the main purpose for opening Unit E 74-76 N 83-85 was to seek a definitive western limit to Feature 25.

By Level 3, three zones of distinct soil coloration were present that remained relatively constant throughout the subsequent excavation (Figure 7). Zone A was established as dark brown soil in the north of the unit and contained mainly historic artifacts. Zone C was defined as predominantly sterile reddish sand in the south of the unit. Zone B possessed much evidence of disturbance and appeared to be a mixture of the two soil types present in Zones A and C. We hypothesized that the distinct line between Zones A and C could indicate the boundary of Feature 25. This idea was further supported by the concentration of brick fragments found in the northern portion of Zone A. Previous units to the east showed brick fragments that seemed to continue westward towards Unit E 74-76 N 83-85. This large concentration of bricks was named Feature 31 and was found inside the border of Feature 25. Therefore the presence of Feature 31 bricks would imply the presence of Feature 25.
Evidence of Feature 25 continued throughout Level 4 as brick fragments appeared and large bricks were found in the floor (Figure 8). By this time, it became apparent that Zone B was highly disturbed, most likely due to a rodent burrow and other bioturbation. This was evidenced by a high concentration of gnawed seeds. A large concentration of concrete was discovered in the northwest of the unit at the base of the existing concrete porch step. This was thought to have possibly been used as an additional step. Another possibility is that this concrete concentration represents leftover concrete from the construction of the cement porch and step. A hole could have been dug in which to place this leftover concrete, thus accounting for its seemingly strange placement and irregular shape.

What began as a small charcoal concentration in the floor of Level 3 developed into Feature 41, an extension of a rock-filled roasting pit previously found in the adjacent Unit E 76-77 N 84-85. This pit contained extensive concentrations of large charcoal fragments as well as fire-cracked rock. A particularly dense concentration of fire-cracked rock appeared in the western portion of the feature (Figure 9). This roasting pit was similar to Feature 21, which had previously been radiocarbon dated to the early seventeenth century. The feature that produced
this specific rock and charcoal concentration seems to have been badly disturbed. Its eastern edge (in Unit E 76-77 N 84-85) was relatively regular and appeared to be part of a circular pit. The western edge (as defined this year) was very irregular.

By Level 6, it became clear that Zone C was sterile sand while Zones A and B had been recently disturbed, as evidenced by high levels of modern plastic debris. With these zones incongruent with the objective of locating the edge of Feature 25, and with limited time available, a 1-x-1-m square was arbitrarily established in the northeast corner of Unit E 74-76 N 83-85. This square had coordinates of E 75-76 N 84-85 and was opened in an effort to find further evidence of Feature 31 (the brick concentration) and Feature 25 (the cellar). In the short time remaining in the field season, the rest of Unit E 74-76 N 83-85 remained unexcavated at 55 cm below the unit datum. Although Feature 41 extended into the southern portion of the 1-x-1-m square, it also was not excavated (see Figure 10).
Upon excavation of the northeast square, more bricks were located, especially in the northern half-meter. These continued through Level 8, further supporting the hypothesized boundary of Feature 25. Unfortunately, at the floor of Level 9 (85 cm below unit datum), a plastic pipe was uncovered, running approximately southwest through the northeast square (Figure 11). This accounted for the high levels of disturbance noted throughout the northern portion of Unit E 74-76 N 83-85, but it also made a boundary to Feature 25 impossible to locate conclusively. The curving path of the pipe to the southwest through Unit E 74-76 N 83-85 also may have accounted for the distinct difference in soil types in Zones B and C throughout the excavation.

Although the search for the western edge of Feature 25 was inconclusive, other conclusions were drawn from data collected throughout the excavation. High concentrations of historic-period artifacts were found in the top layers of the unit that relate to its proximity with the back porch of the lodge. Most of these dated to the twentieth century. For example, many
bottle caps, historic pottery, brass rifle shells, toys, glass, and iron appeared relatively close to
the surface. This suggests that residents of the lodge discarded trash from the south porch.

The discovery of the plastic pipe at the floor of Level 9 accounted for much of the unit’s
highly disturbed soil. Though the bricks were believed to be an indication of Feature 31, their
seemingly random placement, as well as high levels of modern disturbance, suggest that the
residents of the lodge dug through Feature 31 while installing the plastic pipe. Following the
installation, the pit may have been backfilled with the removed dirt at random. This displaced
the bricks from their original context and obscured any evidence for the boundaries of Feature
25. The extensive twentieth-century disturbance of this part of the site probably destroyed
evidence of the western corner of Feature 25.

**Continued Exploration of the Eastern Edge of Feature 25**

Two units were opened to continue the exploration of the eastern edge of Feature 25. Unit
E 81-83 N 85-86 was placed to try to determine the southern edge of Feature 30 (early twentieth
century rubbish pit placed into Feature 25). Unit E 81-83 N 87-88 was placed to determine the
northern edge of the Feature 30 and to further explore Feature 33, a bark-lined pit filled with ash
or plaster that had been cross-section in the wall of the Unite E 81-83 N 86-87 in 2008 (Schurr
2011).

**Unit E 81-83 N 85-86**

This unit was placed to further explore the eastern edge of Feature 25 and to determine
the southern limits of Feature 30, an early twentieth century rubbish pit. Eight levels were
excavated to a depth of 70 cm B.S. The excavation for Level 1 was arbitrary at 10.0 cm B.D,
with the unit datum being at an elevation of 100.496 m compared to the 100.000 m elevation of
the site datum at grid coordinate E 100 N 100. Level 1 consisted of topsoil and sod. Through ¼
inch screening, a Late Woodland collared rim sherd, faunal bones, and a plastic toy clown were
found in the level. Level 2 consisted of the remaining topsoil, with a natural floor at 18.5 cm
BD. Level 2 produced an Early Woodland Adena Point, one Late Woodland projectile point,
and one large prehistoric flake. The assemblage of Levels 1 and 2 clearly indicates the
chronologically mixed nature of the topsoil at the site.

The Level 2 floor contained five well-defined soil zones (Figure 12). Zone A (which
later became Feature 47) consisted of dark brown soil at the eastern end of the unit that produced
artifacts which were primarily prehistoric. Zone B was basically black and full of charcoal
flecks. Zone C was composed of mottled soil. A neck of a glass bottle was protruding from the
northern unit wall above this zone. Zone D was a mix of mortar, charcoal, brick, and black soil
at the western end of the unit. Zone E was also black soil, without any mortar, and less charcoal.
Level 3 had a natural floor at 20-22.5 cm BD with six zones (Figures 13 and 14). The floor was defined by the disappearance of topsoil. Zone D moved into the northwest corner of the unit and was determined to be the southern edge of Feature 30, a trash pit that produced many historic artifacts from the early twentieth century. Zone E receded into the southwest corner, and two new zones were found on the excavation floor (Zones F and G). Zone A continued to produce prehistoric artifacts.

The floor of Level 4 had five zones. The base of the level was at 24-26 cm BD. Zone F disappeared because it was a soil lens in Feature 30. Zone G also disappeared. Zone A remained ambiguous, as either topsoil or prehistoric midden. It produced large pieces of FCR in Level 4. Zone C may be part of the “external halo pit” around Feature 25 to the west. Zone D/Feature 30 produced several large fragments of glass and ceramic historic artifacts that were piece plotted. Large pieces of rusty metal began protruding from the northern wall as well. These items were seen in the south wall of Unit E 83-85 N 86-87 during earlier seasons.
Figure 13. Unit E 81-83 N 85-86 Level 3 Floor.
A. Dark brown (10 YR 3/3) topsoil mottled with reddish sand.
B. Very dark brown (10 YR 2/2) soil with abundant charcoal flecks.
Zone C: Very dark grayish brown (10 YR 3/2) with yellowish brown (10 YR 5/6) sandy patches.
Feature 30:
D. Brownish yellow (10 YR 6/8) mixed with dark brown (10 YR 3/3) and very dark brown (10 YR 3/4). Abundant historic artifacts as shown.
F. Dark brown (10 YR 3/3) with mortar flecks and historic artifacts.
G. Dark yellowish brown (10 YR 4/6) mixed with very dark grayish brown (10 YR 3/2) that could reflect some charcoal staining.
Dotted line: The boundary between zones C (lighter sand) and A (redder sand) was not clearly defined.

Level 5 ended at 30-38.5 cm BD when a new zone, Zone I, appeared in the west end of the unit (Figures 15 and 16). This level was the richest in artifacts, although most of it was literally trash from Feature 30, embedded in complex soil patterns. Portions of the northern wall of the unit in Zone D/Feature 30 were removed for safety reasons. A broken glass bottle and a sharp piece of rusty metal protruding from this portion of the wall were possible hazards so they were removed as piece plots. A brick fragment representing most of a brick was removed from the northern wall area in Zone D/Feature 30. The fragment was marked with a triangle (see below) that is presumed to be a maker’s mark. It is the only marked brick fragment found at the site to date. Zone C disappeared midway through the level, with Zones I and J appearing beneath it. Zone I consisted of cheetah-like mottling and coloring; Zone J was composed of a dark grey soil. Zone I produced a lot of bone, including the skull and more than half of the post-cranium skeleton of a mink. Many historic ceramic sherds appeared in the western end of this level. Zone B completely disappeared at this level and Zone H appeared below it. Zone H was composed of red, mottled, sandy soil.
Figure 15. Unit E 81-83 N 85-86 Level 5 Floor.
Figure 16. Unit E 81-83 N 85-86 Level 5 Floor Map.

A. Very dark brown (10 YR 2/2) soil with prehistoric artifacts.
D (Feature 30). Very dark brown (10 YR 2/2) mottled with mortar and containing historic artifacts.
H. Yellowish Brown (10 YR 5/5) and dark yellowish brown (10 YR 4/3) soil mottled with reddish sand with some prehistoric artifacts.
I. A mixture of dark brown (10YR3/3), dark yellowish brown (10 YR 3/4) and brownish yellow (10 YR 5/6) soil with charcoal flecks.
J. Very dark grayish brown (10 YR 3/2) soil on the outer margin of Feature 30.

Level 6 was full of trials and tribulations. A visiting videographer collapsed 75 percent of the remaining north wall. The entire north wall was taken back to the plastic from the neighboring unit that had been backfilled. The soil was screened. Level 6 was excavated as a 10 cm thick arbitrary level in Zone A and followed the natural floor level across the rest of the unit. Five zones remained in the floor (Figure 17) but they changed in size. Zone D/Feature 30 continued to retreat into the wall and was still mottled with charcoal, mortar, brick, and dark soil. At this point, all larger artifacts had been removed from the feature, and the fill mainly contained items such as nails and crown bottle caps. Zone H expanded to the west and continued to consist of mottled red sandy soil. The boundaries of Zone A continued to expand and contract in congruence with its bordering zones.

The floor of Level 7 ended up being lower than expected at 53-60 cm BD. Zone H was taken down 10.0 cm (12.0 cm after floor troweling) and the natural soil changes for the remaining zones. Zone D/Feature 30 ended at 60.0 cm BD (17.5 cm below Level 6’s floor. That was an error by the excavators, who should have stopped at 10cm). All mortar, charcoal, and brick disappeared. Both Zones I and J remained, expanding directly below it. We soil probed below Zones H and A. Zone H was found to be sterile soil for at least 61 cm below the Level 7 floor. Zone A continued to contain darker soil below the floor, leading us to believe it is prehistoric feature which was defined as Feature 47.
Level 8 was the final level excavated during the field season. It was an arbitrary level, with the same four zones from Level 7. Zone H was not excavated because it was sterile subsoil. Feature 30 was excavated down to 8.5 cm, and 10.0 cm were taken off of Zones J and I. Feature 47 contained prehistoric artifacts such as chert flakes and prehistoric sherds that appeared to belong to two different pots. Zones I and J continued to produce fauna bones and historic ceramic pieces. The most notable historic ceramic piece was a rather large fragment of ironstone with a mocha ware decorative pattern that probably dates after the first half of the nineteenth century.

Upon reaching the floor of Level 8, the field season came to an end. Feature 47 remained in the southeast corner of the unit. The soil probe indicated that there is still at least 42 cm of
soil below the level floor that probably contains prehistoric artifacts. It appears to be a prehistoric pit that extends to the east beyond the unit.

*Unit E 81-83 N 87-88*

The adjacent unit to the south (E 81-83 N 86-87) was completed in 2008 (Schurr 2011). It contained a complex sequence of historic deposits in its western end and along the northern wall. The western end of the unit contained Feature 30, an early twentieth century rubbish pit. Feature 33 was cross-sectioned in the northern wall of the unit. Feature 33 was a bark-lined pit that was filled with soil and ashy or plaster-like grayish white material. The bark lining appeared to have been charred or chemically oxidized. Its function was uncertain because an unknown portion of it was exposed in 2008. It does not seem to have the typical attributes of a Native American smudge pit (Munson 1969). One hypothesis was that it was used to burn limestone to create lime, but the lack of fire-reddened soils beneath the feature suggests that it was not used for burning anything. A second hypothesis is that it was a pit used to mix plaster and that the bark lining was used to keep the plaster from being contaminated with dirt. However, a GPR survey of the area (Schurr 2011:Figure 9) showed that there was a strong anomaly at about 30 cm B.S. that seems to correspond with the unexcavated portion of Feature 33. The materials present in the portion of the feature exposed so far did not appear to be capable of producing a strong GPR reflection, and that suggested further investigations were in order.

As was typical, the sod was removed from the unit and the topsoil was removed in three levels. Although artifacts became more abundant in the west end of the unit and some poorly defined soil patches appeared by the end of Level 2, soil zones were not clearly defined until the Level 3 floor was reached (Figures 18 and 19). Feature 30 was well-defined in the western end of the unit and Feature 33 was well-defined against the south wall. Feature 30 contained the usual mixture of mortar fragments and early twentieth century debris. At this level, Feature 33 consisted of an inner dark area with abundant charcoal and was flecked with mortar, bordered by a lighter halo with less charcoal. A patch of very dark soil with mortar flecks (Zone C) was located on the western edge of Feature 33.
Figure 18. Unit E 81-83 N 87-88 Level 3 Floor.
Figure 19. Unit E 81-83 N 87-88 Level 3 Floor Map.

A. Very dark grayish brown (10 YR 3/2) soil with lighter sandy mottling.
B/Feature 30. Very dark brown (10 YR 2/2) soil with historic artifacts.
C. Very dark grayish brown (10 YR 3/2) soil similar to A except with heavy mortar concentration.

Feature 33:
- Outer – black (10 YR 2/1) soil with charcoal fragments.
- Inner- black (7.5 YR 2/0) soil, less red than the outer ring, heavily speckled with mortar.


New soil zones appeared in Levels 4 and 5 as Feature 30 became somewhat smaller and retreated away from the western wall where a relatively sterile soil (Zone D) appeared in its place by the floor of Level 5 (Figures 20 and 21). Feature 33 continued to consist of a central dark zone with a lighter outer one, although the relative size and placement of the zones moved (consistent with their appearance in the northern wall of E 81-83 N 86-87 from 2008). Level 5 revealed the reason for the strong GPR anomaly within the feature. An iron railroad spike was within the darker portion of the feature in the level. This relatively large and highly conductive iron object was sufficient to produce a small but pronounced GPR signal in this area. Zone E seemed to represent the appearance of subsoil in the eastern portion of the unit. Zone G was a dark area of reddened soil that produced some prehistoric artifacts. It could be an area of midden or part of a prehistoric pit.
Figure 20. Unit E 81-83 N 87-88 Level 5 Floor.
Seven levels were excavated in the unit before the season ended. Features 30 and 33 were still present in the Level 7 floor (Figures 22 and 23), as was Zone G, but all were much diminished in size. Zone E (the upper subsoil) covered much more of the unit floor. Zone G did not resolve into a clearly defined pit by the end of excavation. I could be a fill episode within the upper levels of an Upper Mississippian roasting pit located primarily to the east of the unit, or it could be a patch of dense midden that was disturbed by historic activities. After mapping the Level 7 floor, the unit was filled with plastic and backfilled.
Figure 22. Unit E 81-83 N 87-88 Level 7 Floor.
Figure 23. Unit E 81-83 N 87-88 Level 7 Floor Map.

D. Dark yellowish brown (10 YR 4/4) soil mottled with mortar.
E. Dark yellowish brown (10 YR 4/6) soil with sparse charcoal flecks.
F. Dark brown (10 YR 3/3) soil with some charcoal flecks and mottled with sparse spots of lighter sand.
G. Very dark brown (10 YR 2/2) soil with abundant charcoal fragments.
Feature 30. Brown/dark brown (10 YR 4/3) soil mottled with lighter sand similar to E.
Feature 33. Black (10 YR 2/1) soil with dense charcoal and some ash.

1. Possibly a large spoon handle.

Searching for the Northeast Corner of Feature 25 at E 80-82 N 89-91

In previous seasons, the walls of a probable cellar (Feature 25) were found running approximately east-west through unit E 79-80 N 89-91 and north-south through units E 81-83 N 88-89, E 80-81 N 88-89 and E 81-83 N 86-87. This unit (E 80-82 N 89-91) was opened to identify, verify and locate the intersection of those walls that would form the northeast corner of Feature 25. The earlier excavations showed that the cellar was oriented about 10 degrees from alignment with a north-south and east-west axis. To incorporate the entire predicted northeast corner of the cellar, the opening of a 2-x-2-m unit at E 80-82 N 89-91 was deemed to be an appropriate strategy.

Before removal of a thin layer of sod, it was noted that the ground surface sloped downward only about 2 cm toward the northwest. Additionally, it was known that the northern half of the unit had been covered by a twentieth century concrete-floored garage; this was confirmed by both old photographs and the current landowner who had removed the structure, floor and foundation. The soft, sandy, poly-lined walls on two sides of the unit (from previous units) and the relatively recent construction and removal of the garage added elements of complexity that were incorporated into the excavation strategy and the interpretation of the findings.

The soil from Levels 1 and 2 of the unit was characterized by abundant modern building materials (nails, tar paper and shingle fragments) throughout the southern half of the unit, mixed
historic (ceramics, food packaging) and prehistoric (lithic debitage) artifacts along the southern wall but seemingly concentrated in the southeast corner, and mortar/plaster fragments sprinkled throughout the unit. By Level 2 the floor had been leveled to a uniform depth below the unit datum point.

In Level 3, the top of a large stone (approximately 20 cm in diameter) appeared. The size of the stone is unusual for this site. The location of the stone approximated the predicted north wall of the cellar and was near the expected corner of the cellar. The stone was left in place through Levels 4 and 5. However, other than location, no evidence was discovered that indicated that the stone had been incorporated into either historic or prehistoric structures, nor did the stone show evidence of having been burned or heated.

The Level 3 floor (Figures 24 and 25) was characterized by a layer of mixed mottled, red and grey soil covering about 80 percent of the floor, the large stone, small areas of sterile red subsoil at the northern corners of the unit, a concentration of mixed historic and prehistoric artifacts in the southwestern corner, and a dark soil stain in the southeastern corner.

Figure 24. Unit E 80-82 N 89-91 Level 3 Floor.
Figure 25. Unit E 80-82 N 89-91 Level 3 Floor Map.

A. Yellowish brown (10 YR 5/4) sand.
B. Dark yellowish brown (10 YR 4/4) sand.
C. Very dark grayish brown (10 YR 3/2), heavy concentration of historic artifacts.
D. Dark yellowish brown (10 YR 4/4) mottled sand.
E. Very dark grayish brown (10 YR 3/2) soil, roughly semicircular.
F. Dark yellowish brown (10 YR 4/6) soil.
G. Very dark grayish brown (10 YR 3/2) with charcoal concentrations.
H. Very dark grayish brown (10 YR 3/2) adjacent to a large rock.
Matrix. Dark brown (10 YR 3/3) soil, very mottled.

Beginning in Level 4, the historic artifacts in the southwest corner and along the southern wall appeared to become less modern with a higher proportion of nineteenth century materials including clay pipe fragments, percussion caps, lead shot, and pearlware ceramic fragments. These historic materials continued to be mixed with prehistoric lithic debitage and some cordmarked sherds. Also, the overburden of mottled grey soil with flecks of plaster, concrete and caulking began to recede as the zones of subsoil in the northern corners began to grow and radiate outward (This trend of a growing zone of subsoil from north to south continued through Level 7.).

In the Level 6 floor, as the mottled mixed over-burden layer shrank and within the growing zones of red subsoil, two rectangular zones of dark soil emerged (Figures 26 and 27). One zone (Zone N/Feature 45) ran from a point at approximately E 80.7 N 91 at the northern wall, south about 1 meter, with a width of 20 cm. Within this was a circular dark stain, Zone O. Zone O, a suspected post-mold and Feature 45, a potential prehistoric wall trench, were investigated and sectioned via a slot trench. Zone O disappeared within a few centimeters and no further evidence of a post was discovered. The trench was expanded to incorporate all of Feature 45 and no evidence of a prehistoric feature was found. A second rectangular trench (20 cm wide and running east-west from point E 82 N 89.9 at the eastern wall) was defined as Feature 46 and also investigated utilizing a slot trench. Feature 46 appeared to be deeper than Feature 45, contained no prehistoric materials and its bottom was not reached by Level 7.
Figure 26. Unit E 80-82 N 89-91 Level 6 Floor.

Figure 27. Unit E 80-82 N 8-91 Level 6 Floor Map.

A. Yellowish brown (10 YR 5/4) culturally sterile sand.
B. Dark yellowish brown (10 YR 4/4) culturally sterile sand
Feature 45(N). Linear feature, possible wall trench or footer.
Feature 46(P). Linear feature, possible wall trench or footer.
O. Dark circular stain, suspected posthole (but only a few cm deep when cross-sectioned).
R. Irregular dark soil stain.
S. Imprint from large stone found at the base of Level 3.
1. Concentration of bone fragments.
2. Outline of slot trench used to bisect O and Feature 45
3. Outline of slot trench used to bisect Feature 46.
It is believed that Feature 45 and particularly Feature 46 were associated with the twentieth-century garage foundation. The location of Feature 46 seems to closely match what would have been the perimeter foundation of the garage. North of Feature 46 few modern construction materials were found, while south of this east-west line discarded building materials were present in the sifted soil. The concrete floor could have capped the soil north of Feature 46. Debris from both the construction and demolition of the garage were left behind after the concrete floor was removed.

Interpretation of the unit became significantly easier at Level 7. About 70 percent of the unit floor, including the entire northern half, was red, culturally sterile, sand (Figure 28). The probable garage foundation (Feature 46) running east-west continued to be visible. Near the south-east corner, was a dark floor stain which could have been the bottom of a prehistoric pit. This potential pit had been partially obscured in the upper levels by the activities associated with the construction and demolition of both Feature 25 (late 1800s or early 1900s) and the garage (early 2000s). This area of the unit floor was also associated with lithic flakes at nearly all levels. Present at Level 7, with a high degree of visual clarity, was a nearly rectangular dark stain bounded on the north by a line starting in the western wall (at approximately E 80 N 90.3) and on the east by a border running from the southern wall (starting near a point at E 81 N 89). The intersection of these two lines (E 81 N 90.3) appears to define the northeast corner of the cellar walls (Feature 25).

Figure 28. Unit E 80-82 N 89-91 Level 7 Floor.

Excavations for the 2010 season ceased at Level 7. The artifacts screened from the soil coinciding with the interior of the cellar are consistent with a long sequence of filling with debris beginning in the mid-1800s through the present. Prior excavations indicated the presence of Feature 25 walls at significantly deeper strata so it is possible that further removal of the halo of fill associated with the cellar may yield a more exact definition of the corner location. However, it should be noted that the intersection of the walls of Feature 25 as discovered in this unit, is within 10-15 cm of the point predicted by extending the east-west and north-south boundaries.
defined by previous units. If further excavation was to be done regarding the corner of feature 25, it is likely that the feature would become better defined a further 20 to 30 centimeters deeper, based on notes taken by previous excavation units.

**Exploration of Upper Mississippian Roasting Pits**

Prior excavations of the area to the east of the Lodge near its northern end identified two Upper Mississippian roasting pits (Schurr 2011, Schurr 2006). Because much of the area had been covered by a late twentieth century garage, it was relatively free of recent historic disturbance (except that associated with the construction and removal of the concrete garage floor). Unit E 84-86 N 92-94 was placed in this area to the west of an earlier unit (E 82-84 N 92-94) in order to search for additional prehistoric pits in this part of the site.

This portion of the site is relatively unusual because there is very little topsoil. The original topsoil was apparently graded away when the garage was built. Excavation began in arbitrary levels to search for features. The first two levels contained many concrete fragments. These were collected on a 0.5 inch screen, weighed, recorded, and discarded. By the floor of Level 4 (Figures 29 and 30), several soil zones were well defined in the unit. Most of the floor consisted of light, culturally sterile sand. A darker band (Zone B) about 20 to 25 cm wide paralleled the west wall of the unit and contained recent historic debris, including mason’s twine. Zone B clearly represents the backfill in Unit E 82-84 N 92-94 that was excavated in 2005. The overlap between the two units indicates that there was a difference of about 20 cm in the east-west coordinates of the site grid between the 2005 excavations and those of the 2010. This difference probably appeared when the primary point for establishing the orientation of the site grid axis was redefined from E 100 N 100 to the southeast corner of the concrete step at the southern edge of the Lodge (E 75.843 N 85.298, Z = 100.648). The new reference point was necessary when the field trailer was placed on the site with its northwest corner covering E 100 N 100. These units are the furthest north to date from the typical transit station (at E 81 N 75, Z = 100.413) so they are most subject to east-west coordinate errors.

In addition to the former unit, two prehistoric features were defined in the floor of Level 4. Both were roughly circular stains. Feature 43 was a somewhat irregular patch of dark reddish brown (5 YR 2.5/2) soil against the south wall of the unit. It had been previously described as Zone G in the floor of Level 3 but it was not well-defined enough to be considered a feature at that time. As the definition improved by the floor of Level 4, it was assigned a feature number at that point. Feature 44 had been defined in the floor of Level 3. The soils of Feature 44 produced a daub concentration and some grit-tempered sherds in Level 4. By the end of the level, the feature was a well-defined circular stain with a very dark gray (2.5 YR 3/1) center and a lighter dark yellowish brown (10 YR 4/4) halo.
Figure 29. Unit E 84-86 N 92-94 Level 4 Floor.
Figure 30. Unit E 84-86 N 92-94 Level 4 Floor.

B: Backfill from former unit, very dark gray (5 YR 3/1).
1. Mason's twine, probably used to outline or for a line level in the former unit.
Feature 43 (K). dark reddish brown (5 YR 2.5/2) soil. Prehistoric pit feature.
K1. Lighter area of reddish brown (5 YR 4/3) soil within Feature 43.
Feature 44 (L). Dark yellowish brown (10 YR 4/4) halo surrounding central zone of very dark gray (2.5 Y 3/0) soil. Prehistoric pit feature.
N. Subsoil, sandy matrix, strong brown (7.5 YR 5/8) in color.

The features became more defined by Level 6 (Figure 31) and maintained their relative shapes through Level 7. The remnants of both features were cross-sectioned in subsequent excavation to produce profiles of their bottoms. Very little of Feature 44 remained below the Level 7 floor (only about 5 cm remained in the profile). The feature was a pit with relatively straight sides that tapered inward to an uneven but generally flat bottom. The concentric darker and lighter zones continued through the entire feature. There was no evidence of burning at the base of the feature, so it was not a roasting pit.
Feature 43, on the other hand, was clearly exposed in profile in the southern wall of the unit (Figures 32 and 33). It was a pit with rounded sides and a relatively flat bottom with a diameter of about 150 cm, a basal diameter of about 60 cm, and a depth of 80 cm. The eastern bottom of the feature appears to have been disturbed by bioturbation. Reddened soil and abundant charcoal, typical of this type of pit, were present at the bottom of the feature. A flotation sample was taken from the densest layer of charcoal near the feature’s base. The
feature was re-filled with several different types of soils. Some of these had been segregated during excavation when they were recognized in plan view, but others were not. Further excavation of the southern half of the feature should be conducted to isolate the various zones. Faunal remains were present in the different fill episodes. Field identifications included turtle, fish, deer, rodent, and mussel shell.

Figure 33. Feature 43 Profile Map Showing Fill Episodes.

1 and 2. Reddish yellow (7.5 YR 7/8) sandy soil mottled with very dark gray (5 YR 3/1) topsoil.
3. Very dark grayish brown (10 YR 3/2) soil with charcoal flecks.
4. Dark reddish brown (5 YR 3/3) soil mottled with lighter Strong brown (7.5 YR 4/6) sand.
5. Dark reddish brown (5 YR 3/3) soil.
8. Strong brown (7.5 YR 4/6) soil.
9. Strong brown (7.5 YR 5/6), slightly darker in tone than 8.
10. Dark brown (7.5 YR 3/3) soil.
11. Black (10 YR 2/1) charcoal concentration.
12. Strong brown (7.5 YR 5/8) subsoil.
13. Black (10 YR 2/1) charcoal concentration.
16. Mottled sand, probably a rodent burrow or root trace.
17. Dark yellowish brown (10 YR 3/6) sand.
18. Mottled 17 with charcoal.
20. Strong brown (7.5 YR 4/6) oxidized sand.
Summary of Features

Forty two features had previously been defined at Collier Lodge. Five features were defined in 2010. Their characteristics are summarized in Table 2. Details about each feature were provided in the narrative descriptions of the unit excavations (above). Three were prehistoric in age and two were recent.

Prehistoric Features

The most common type of prehistoric feature at the site is an Upper Mississippian roasting pit, typically a circular pit with a flat or slightly rounded bottom approximately 1 m in diameter and a little over a meter deep. Similar pits have been reported from the Upper Mississippian Griesmer site in northern Indiana (Faulkner 1972:45). Faulkner believes this type of pit was used to roast water lotus tubers and for refuse disposal after their use as roasting pits. In addition to the nine Upper Mississippian roasting pits previously identified (Features 3, 10, 18, 23, 26, 28, 36, 40 and 42), one additional such pit were defined in 2010 (Feature 43). Two other prehistoric pit features (Features 44 and 47) were also defined. Feature 44 was completely excavated. It was a prehistoric pit that was slightly smaller in size than the typical roasting pit and lacked the characteristic oxidized sand layer of a roasting pit. This type of pit was also found at the Griesmer site (Faulkner 1972). The other prehistoric feature (Feature 47) was defined as a circular stain in the corner of a unit. It was not completely excavated so its nature and function were not determined. It could be another Upper Mississippian roasting pit.

Historic Features

Two historic features were defined in 2010 (Features 45 and 46). Both were dark linear stains in Unit E 80-82 N 89-91. Upon cross-sectioning, they were shown to be of recent age. Their location and alignment suggests that they mark the southwest corner of the concrete garage pad that formerly stood in this part of the site. It is thought that the pad was built in the 1980s and it was removed in the early 2000s.
Table 2. Features defined in 2010.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Unit</th>
<th>Level of Definition</th>
<th>Appearance</th>
<th>Function</th>
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</thead>
<tbody>
<tr>
<td>43</td>
<td>E 84-86 N 90-92</td>
<td>4</td>
<td>Semicircular stain against south wall</td>
<td>Upper Mississippian roasting pit</td>
</tr>
<tr>
<td>44</td>
<td>E 84-86 N 90-92</td>
<td>4</td>
<td>Dark circular stain</td>
<td>Prehistoric pit</td>
</tr>
<tr>
<td>45</td>
<td>E 80-82 N 89-91</td>
<td>6</td>
<td>Linear feature</td>
<td>Concrete garage pad footing</td>
</tr>
<tr>
<td>46</td>
<td>E 80-82 N 89-91</td>
<td>6</td>
<td>Linear feature</td>
<td>Concrete garage pad footing</td>
</tr>
<tr>
<td>47</td>
<td>E 81-83 N 85-86</td>
<td>7</td>
<td>Dark stain in southeast unit corner</td>
<td>Prehistoric pit?</td>
</tr>
</tbody>
</table>
The Artifact Assemblage

Laboratory Procedures

After each context was completed, all the bags or items for the FS number assigned to the context were deposited at the FS station. The FS samples were transferred to the lab field lab periodically throughout the day and each sample was logged into the lab tracking notebook. Field specimen numbers for all contexts are shown in Appendix 1.

Each volunteer working in the field lab was given written lab procedures. Every screened sample was re-screened through a ½ inch (1.27 cm) screen to segregate large fragments of very common artifacts like brick fragments and FCR from small ones. All artifacts retained on the ½ inch screen were washed. The portion that passed through the screen was carefully examined and any interesting artifacts (e.g. anything that was not a brick fragment, small piece of FCR, natural pebble, etc.) were removed for further processing. The remainder of the sample between ¼ and ½ inch (.64-1.27 cm) in size was termed “residue” and was placed in a bag with a tag labeled with the FS number for later examination. All residue samples were weighed and examined for artifacts before discard.

Faunal fragments were then removed from all non-residue samples for washing in the regular lab. This was so that they could be washed over a screen in case they were very fragile. The remaining durable artifacts were cleaned with a soft brush and water. Each FS sample was placed in a separate tray to which the FS tag was clipped with a clothes pin. The cleaned samples were allowed to dry in a room of the field lab equipped with air conditioning and a dehumidifier. Depending on the sample’s size and the ambient humidity, this usually required one or two days. Dry samples were placed in plastic bags along with their FS tags and taken to the Archaeology Laboratory at Notre Dame for further processing. Unusual or fragile specimens were wrapped in foil or otherwise handled separately from the typical FS sample.

The cleaned samples were rough sorted into at least seven categories of major material types:

1. Ceramic (pottery, noting historic or prehistoric)
2. Glass
3. Metal
4. Fauna (bone and shell)
5. Brick
6. Stone
7. Other (with a space to note what the item is).

Each material type was placed in a separate bag with its own tag, labeled with the FS number and the initials of the sorter. Experienced sorters were able to use more specific categories (for example, separating prehistoric and historic ceramics, or sorting chert from other types of stone). Each material type was then cataloged using the appropriate categories. The
objects in each FS number were identified, the identifications were recorded on slips, along with the counts and weights of each type of artifact. After being checking by the author, each slip was assigned a catalog number, the artifacts were placed in labeled bags, and the information on each catalog slip was entered into the artifact database. Every catalogued item was verified by the author.

**Prehistoric Artifacts**

**Prehistoric Ceramics**

The prehistoric ceramic sherds were sorted and described by temper, position on the vessel, exterior and interior surface treatments, and applied decoration. The inventory of prehistoric ceramics is given in Appendix 2.

**Table 3. Prehistoric Pottery Abundances by Surface Treatment and Decoration.**

<table>
<thead>
<tr>
<th>Temper and Surface Treatment</th>
<th>Number</th>
<th>%</th>
<th>Weight (g)</th>
<th>%</th>
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<tbody>
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<td>15.2</td>
<td>101.8</td>
<td>14.7</td>
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<td>Cordmarked, smoothed</td>
<td>4</td>
<td>1.1</td>
<td>5</td>
<td>0.7</td>
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<td>Smooth surface</td>
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<td>0.6</td>
<td>5.3</td>
<td>0.8</td>
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<tr>
<td>Fabric impressed?</td>
<td>1</td>
<td>0.3</td>
<td>1.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Eroded</td>
<td>21</td>
<td>5.9</td>
<td>22.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Grit, Coarse</td>
<td>7</td>
<td>2</td>
<td>30.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Shell</td>
<td>114</td>
<td>32</td>
<td>222.5</td>
<td>32.1</td>
</tr>
<tr>
<td>Cordmarked</td>
<td>18</td>
<td>5.1</td>
<td>23.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Cordmarked, smoothed</td>
<td>2</td>
<td>0.6</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>Smooth surface</td>
<td>67</td>
<td>18.8</td>
<td>183.1</td>
<td>26.4</td>
</tr>
<tr>
<td>Eroded</td>
<td>27</td>
<td>7.6</td>
<td>13.8</td>
<td>2</td>
</tr>
<tr>
<td>Shell and Grit</td>
<td>15</td>
<td>4.2</td>
<td>23.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Undetermined</td>
<td>1</td>
<td>0.3</td>
<td>0.9</td>
<td>0.1</td>
</tr>
<tr>
<td>Total</td>
<td>356</td>
<td></td>
<td>692.3</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 3, the most common temper is shell, indicating that the most intense use of pottery occurred during the Upper Mississippian period (after about A.D. 1100). Most of the grit tempered sherds are cordmarked. Very few have smooth or smoothed over surfaces, and only one may have had a surface decorated by impressing it with a piece of fabric (where the warp and woof threads are visible in the imprint). The coarse grit tempered sherds are poorly fired and thick, and probably represent pieces of Early Woodland Marion Thick pottery. Most are eroded, but two show fabric impressions on their interior surface, a characteristic attribute of Marion Thick. Smooth surfaces predominate amongst the shell tempered sherds. Smooth surfaces on shell tempered pottery are through to have become more common over time, and would be consistent with a date after A.D. 1400 (Faulkner 1972:168-170). Some sherds appear
to have been tempered with a mixture of shell and grit. All of the mixed temper sherds were cordmarked except for one with a smooth surface and one that was badly eroded.

For the grit tempered sherds, decoration is restricted to rims (Table 4). These include one rim with interior lip notches (Figure 34e and f), one with vertical cordmarking, and one with a small collar characteristic of early Albee Late Woodland pottery. Two other collared rims appear to be very similar to early Albee phase pottery but were tempered with a mixture of shell and grit (Figure 34a and b). Shell temper is not a characteristic of Albee pottery. Thickened rims or folded collars with shell and grit temper are a characteristic of Late Prehistoric Oliver phase assemblages (Ball 2011:13, McCullough 1991). However, Oliver phase sherds often have smoothed surfaces below the rim and bear other forms of decoration. Both attributes are lacking in this case. It has been noted before (Schurr 2003) that many different types of collared rim vessels were in use in the Kankakee Valley after about A.D. 600. The shell and grit tempered rims from the 2010 assemblage further drive that point home.

![Figure 34. Prehistoric Rim Sherds](image)

The shell tempered rims and decorated body sherds (Table 4) bear typical Upper Mississippian Fifield phase decorations that include punctates (Figure 34d), medium trailing (an attribute of the type Fifield Trailed), strap handles, and everted rims. Several of the rim sherds are very eroded, but three are complete enough to show that the lips were not decorated with impressions. Three rims sherds that could be refitted together (2010.01.12 and 13) came from a vessel with a maximum rim diameter of 43 cm based on approximately seven percent of the rim circumference represented by the refitted sherds (Figure 34c). The sherds show a deep groove at the body/rim junction, a characteristic that has not been seen before at Collier Lodge. It could be a result of the way in which the everted rim was modeled. Perhaps a strap handle was placed below the rim notch, but that cannot be determined for certain because only the rim is present. One eroded rim sherd appears to bear impressions just below the lip. Similar rim sherds are described in an earlier report (Schurr 2011:Figure 101e). From a chronological sense, the
Collier Lodge assemblage appears to indicate the Collier Lodge was occupied sometime after the Fifield phase occupation of the Fifield site and before the Huber phase occupation of Griesmer.

Table 4. Decorated Prehistoric Sherds.

<table>
<thead>
<tr>
<th>Cat No.</th>
<th>Portion</th>
<th>Temper</th>
<th>Exterior</th>
<th>Decoration</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Rim</td>
<td>Grit</td>
<td>Cordmarked</td>
<td>Notched Int Lip</td>
</tr>
<tr>
<td>23</td>
<td>Rim &amp; Neck</td>
<td>Grit</td>
<td>Cordmarked, Vertical</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Collar</td>
<td>Shell &amp; Grit</td>
<td>Shell and</td>
<td>Cordmarked</td>
</tr>
<tr>
<td>7</td>
<td>Rim with Collar</td>
<td>Grit</td>
<td>Cordmarked, Vertical</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Rim with Collar</td>
<td>Grit</td>
<td>Cordmarked</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>Body</td>
<td>Shell</td>
<td>Smooth</td>
<td>Punctates</td>
</tr>
<tr>
<td>54</td>
<td>Body</td>
<td>Shell</td>
<td>Smooth</td>
<td>Trailed</td>
</tr>
<tr>
<td>27</td>
<td>Body</td>
<td>Shell</td>
<td>Cordmarked</td>
<td>Trailed, Wide</td>
</tr>
<tr>
<td>86</td>
<td>Body</td>
<td>Shell</td>
<td>Cordmarked</td>
<td>Trailed, Wide</td>
</tr>
<tr>
<td>413</td>
<td>Body</td>
<td>Shell</td>
<td>Cordmarked</td>
<td>Trailed, Wide</td>
</tr>
<tr>
<td>13</td>
<td>Handle, Strap</td>
<td>Shell</td>
<td>Smooth</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Neck</td>
<td>Shell</td>
<td>Smooth</td>
<td>Groove</td>
</tr>
<tr>
<td>12 &amp; 13</td>
<td>Rim</td>
<td>Shell</td>
<td>Smooth</td>
<td>Deep Groove at Neck</td>
</tr>
<tr>
<td>33</td>
<td>Rim</td>
<td>Shell</td>
<td>Smooth</td>
<td>Notched</td>
</tr>
</tbody>
</table>

In addition to sherds from pottery, pieces of fired clay without apparent temper were found. It was previously not known if similar items found in earlier years were daub (used to cover a structure or seal a pit) or waster clay (left over clay from pottery manufacture). The relatively large amount recovered in 2010 (216 pieces weighing 611.9 g) and the presence of plant impressions on some pieces suggests they are daub. Without any evidence of structure, it is possible that the daub was somehow used in the roasting process, perhaps to seal the pit. Daub was not reported from the Griesmer site, which had very similar roasting pits (Faulkner 1972).

**Prehistoric Lithic Artifacts**

Stone (lithic) artifacts were sorted by whether or not they were debitage or tool fragments, then further described as necessary. The lithic inventory for the excavations is given in Appendix 3. Lithic artifacts recovered from the 2010 excavations were entirely produced by chipping. No ground stone artifacts were found. All the chipped stone artifacts were made of chert. They are summarized in Table 5.

The vast majority of the chipped stone artifacts consist of debitage, the leftover products of tool manufacture or rejuvenation. Primary flakes have one surface composed of at least 50% cortex. These were produced during the initial stages of converting a flint nodule into a tool.
Secondary flakes are products of tool production and resharpening after the cortex has been removed. The relatively small number of primary flakes compared to secondary ones indicates that most chert artifacts came to site in a relatively refined form. Some flakes were modified, either by deliberate modification of the edge, or by use wear such as crushing or heat fracture. There seems to have been relatively little primary tool production at the site. That is consistent with the lack of chert resources in the region. The relative rarity of cores and core fragments also fits the pattern.

Crude bifaces are usually bifaces that were broken or damaged before the tool could be completely refined, although in some cases they may have simply been expedient tools when a more refined biface was not needed. Crude bifaces are primarily present as fragments (n=3), suggesting they either broke during manufacture, or they were heavily recycled. All three examples are of low quality chert and could easily have broken along pre-existing flaw lines before they were further refined. One complete crude triangular biface probably dates to the Upper Mississippian period because its size and overall shape is similar to more refined large triangular bifaces from that period.

Relatively complete tools are listed in Table 6. The assemblage included only two complete projectile points (Figure 35a and c).

### Table 5. Prehistoric Chipped Stone Artifacts.

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>5</td>
<td>63.8</td>
</tr>
<tr>
<td>Core Fragment</td>
<td>7</td>
<td>53.1</td>
</tr>
<tr>
<td>Blocky Fragment</td>
<td>26</td>
<td>95.7</td>
</tr>
<tr>
<td>Flake, Primary</td>
<td>45</td>
<td>99.7</td>
</tr>
<tr>
<td>Flake, Secondary</td>
<td>1397</td>
<td>636.2</td>
</tr>
<tr>
<td>Flake, Modified</td>
<td>17</td>
<td>59.2</td>
</tr>
<tr>
<td>Biface</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Biface Fragment</td>
<td>18</td>
<td>33.3</td>
</tr>
<tr>
<td>Crude</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Base</td>
<td>8</td>
<td>12.9</td>
</tr>
<tr>
<td>Edge</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Tip</td>
<td>5</td>
<td>7.2</td>
</tr>
<tr>
<td>Drill Fragment</td>
<td>2</td>
<td>4.6</td>
</tr>
<tr>
<td>Scraper</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td><em>Pieces Esquillés</em></td>
<td>1</td>
<td>2.3</td>
</tr>
</tbody>
</table>
Table 6. Chipped Stone Bifaces and Fragments

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>175</td>
<td>Biface</td>
<td>Triangular Knife</td>
</tr>
<tr>
<td>368</td>
<td>Biface</td>
<td>Triangular, crude</td>
</tr>
<tr>
<td>155</td>
<td>Biface</td>
<td>Very thin</td>
</tr>
<tr>
<td>167</td>
<td>Biface Fragment</td>
<td>Base, Triangular</td>
</tr>
<tr>
<td>410</td>
<td>Biface Fragment</td>
<td>Base, Expanding Stem</td>
</tr>
<tr>
<td>230</td>
<td>Biface Fragment</td>
<td>Base, Stemmed</td>
</tr>
<tr>
<td>267</td>
<td>Biface Fragment</td>
<td>Base, Triangular</td>
</tr>
<tr>
<td>327</td>
<td>Biface Fragment</td>
<td>Base, Triangular point</td>
</tr>
<tr>
<td>385</td>
<td>Biface Fragment</td>
<td>Base and Blade, Steuben Expanding Stem</td>
</tr>
<tr>
<td>165</td>
<td>Drill Fragment</td>
<td>Half</td>
</tr>
<tr>
<td>323</td>
<td>Drill Fragment</td>
<td>Tip</td>
</tr>
<tr>
<td>162</td>
<td>Pieces Esquillés</td>
<td>Adena Merom Expanding Stem variant?</td>
</tr>
<tr>
<td>174</td>
<td>Projectile Point</td>
<td>Complete, Merom Expanding Stem</td>
</tr>
<tr>
<td>195</td>
<td>Projectile Point</td>
<td>Complete, variant?</td>
</tr>
<tr>
<td>386</td>
<td>Projectile Point</td>
<td>Complete, Triangular</td>
</tr>
<tr>
<td>172</td>
<td>Scraper</td>
<td></td>
</tr>
</tbody>
</table>
**Scrapers**

One small disk-shaped scraper was found (Figure 35g). It was made on what appears to be a fragment of biface that was trimmed along one edge.

**Pieces Esquillés**

A *pieces esquillés* is a chert wedge that was used to split bone or wood. The assemblage contains one example made from a medial biface fragment (not shown).

**Drills**

Drills or perforators are often found in prehistoric lithic assemblages. The 2010 Collier Lodge assemblage contained two fragments of drills (a t-drill that was split longitudinally [Figure 35h] and a tip [Figure 35i]).

**Projectile Points and other Refined Bifaces**

Projectile points are usually well-made bifaces that were probably used to tip arrows, spears or darts, although some may have been used as hafted knives.

**Triangular Points**

Triangular points and other triangular bifaces are characteristic of the Late Prehistoric period when the bow and arrow was introduced into the region. They may appear as early as A.D. 600 (during the Late Woodland period) and were the dominant projectile point by the Upper Mississippian period. Faulkner (1972) defined three main types of triangular points in his study of the Griesmer and Fifield chipped stone artifacts. Type I consisted of isosceles triangles while the Type II points were equilateral triangles. One complete Type I (Figure 35c) and one base fragment that appears to be from a Type I triangle were found (Figure 35d). Type III was distinguished by excurvate sides and a straight basal edge. A large triangular biface (Figure 35f) that was probably used as a knife fits into the Type III category. Types I and III were thought to have been used during the Upper Mississippian period.

**Stemmed Points**

Stemmed points first appear during the Early Archaic and persist up until at least the Middle Woodland period. Stem shapes vary from contracting, to straight, to expanding. Intermediate forms are sometimes difficult to assign to specific types. An Adena point (Figure 35a) dates to the Early Woodland period between 800-200 B.C. and is a type that is widely distributed across the American midcontinent (Justice 1987).
Expanding Stemmed Points

Expanding stemmed points were used from the Middle Archaic to the early Late Woodland periods. They were the dominant point type during the later Middle Woodland. A Steuben Expanding Stem point (Figure 35b) in the assemblage was probably manufactured between A.D. 100-500 (Justice 1987). Points of this type were in use during the terminal Middle Woodland Weaver phase in the central Illinois Valley and the late Middle Woodland LaPorte phase in northwestern Indiana (Mangold and Schurr 2006).

Intermediate Forms

Intermediate forms are points that have bases that are ambiguous and are intermediate in morphology between stemmed and corner notched forms. One small point has a straight to expanding stem and an excursive triangular blade (Figure 35e). Its general shape is similar to the type Merom Expanding Stem but it is not typical of the type because it has barbed shoulders (an attribute not present in Merom Expanding Stem points). It could represent a regional variant because Merom Expanding Stem points are usually found in the Lower Ohio Valley area. The type dates to the Late and Terminal Archaic, perhaps around 1500 B.C. (Justice 1987:130-132).

Historic Artifacts

Historic Ceramics

Ware Types

The historic ceramics were catalogued using the system previously used to organize historic ceramics from Marshall County, Indiana (Secunda and Schurr 2005) and the Collier Lodge assemblages collected between 2003-2005 (Schurr 2006) and 2006-2009 (Schurr 2011).

Fine Earthenwares

Fine or refined earthenwares are well made types of pottery that are often decorated. They were used as table wares although some wares, such as porcelain, may have been used for purely decorative items or toys. Table 7 provides a list of the finewares present in the assemblage along with counts and weights for each ware. A full inventory of the fineware sherds is given in Appendix 4. The table also shows the years when each type of ware was in common use if the ware was used during just part of the total time period when the site was used (porcelain was used throughout the entire occupation span).

When the weights of each ware type in the 2010 assemblage are compared to the assemblage collected between 2006-2009 (Figure 36), it can be seen that the 2010 assemblage contains a higher proportion of ironstone, the latest type of ware produced, and a lower proportion of pearl ware (the earliest ware). This reflects a much higher proportion of contexts dating from the late nineteenth century into the twentieth century that were investigated in 2010.
compared to earlier years. Large ironstone sherds from late twentieth century vessels deposited in the pipe trenches at the southern end of the lodge are major contributors to the ironstone totals.

### Table 7. Fine Earthenware Abundances

<table>
<thead>
<tr>
<th>Ware</th>
<th>Number</th>
<th>Percent</th>
<th>Weight (g)</th>
<th>Percent</th>
<th>Dates of Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearl</td>
<td>53</td>
<td>10</td>
<td>149.2</td>
<td>14.9</td>
<td>1780-1830</td>
</tr>
<tr>
<td>White</td>
<td>315</td>
<td>59.5</td>
<td>364.6</td>
<td>36.5</td>
<td>1830-present</td>
</tr>
<tr>
<td>Ironstone</td>
<td>139</td>
<td>26.3</td>
<td>409.7</td>
<td>41</td>
<td>1840-present</td>
</tr>
<tr>
<td>Porcelain</td>
<td>3</td>
<td>0.6</td>
<td>12.5</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Yellow</td>
<td>19</td>
<td>3.6</td>
<td>62.2</td>
<td>6.2</td>
<td>1825-present</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>529</td>
<td>998.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 36. Relative Ware Weights.

**Decorated Fine Earthenwares**

The decorated fine earthenwares provide more specific information about the occupation chronology of the site than do just ware types alone. That is because decorative techniques evolved more rapidly than ware types and were more diverse. As shown in Table 8, many different decorative types, based on technique and palette, are present in the assemblage. All the decorations at the site date from the early nineteenth to the twentieth century, just as the wares did. Decorative methods in use during the early nineteenth century are especially abundant in the collection. These include handpainted (Figures 37b and 38a and b) and transfer printed (Figure 38c-e) pearlwares and white wares produced in England. These styles were common imports prior to the Civil War. They were widely used during the later part of the Removal Period (between about A.D. 1820–1840) (Schurr 2006). Ceramics of these types extend into the period of early Euroamerican settlement, beginning into the late 1830s and extending up until the
Civil War. Later transfer prints and handpainted designs use different palettes and motifs and were usually placed on ironstone (Figure 39a, b and e). In general, most of the sherds from Collier Lodge are too small to permit the identification of specific decorative motifs. Those that can be defined include monochromatic floral handpainting (especially common during the 1820s, Figure 37b, probably from the same vessel as the sherds shown in (Schurr 2011:Figure 112), sprig floral hand painting designs in the late palette (Figure 38a and b, dating between about 1835 to 1855), and hand painted annular (banded) decoration (1820 to 1850), Figure 38c and d. As the earliest documented Euroamerican occupation of the site began in 1834, the presence of early hand painted floral monochrome designs in conjunction with blue edged ware (Figure 37a) suggests that there was a Removal Period occupation of the site during the 1820s and the early 1830s. The sponge wares (Figure 37d and e) and sprig hand painted wares (Figure 38a and b) were all in common use during the Sawyer and Baum occupations of the site. Late nineteenth and early twentieth century ceramics include ironstone wares (sometimes with molded decorations or a pale blue wash, Figure 39c), and floral decals (Figure 39d). All were manufactured after 1830. Other late nineteenth century or even twentieth century wares include plain yellow wares or yellow ware with brown Rockingham glaze (Figures 38a and b).

Figure 37. Nineteenth Century Historic Ceramic Decorations.
Figure 38. Hand Painted Sprig and Annular Decorations.

Figure 39. Late Nineteenth Century Decorations.
Figure 40. Late Nineteenth and Twentieth Century Decorations.

Table 8. Fine Earthenware Decorations and Dates.

<table>
<thead>
<tr>
<th>Ware</th>
<th>Decoration</th>
<th>No.</th>
<th>Weight (g)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearl</td>
<td>Annular, Blue and Brown</td>
<td>5</td>
<td>60.6</td>
<td>1805-1830</td>
</tr>
<tr>
<td></td>
<td>Blue Edgeware</td>
<td>1</td>
<td>1.2</td>
<td>1780-1830</td>
</tr>
<tr>
<td></td>
<td>Hand Painted, Green</td>
<td>1</td>
<td>0.2</td>
<td>1805-1830</td>
</tr>
<tr>
<td></td>
<td>Hand Painted, Sprig</td>
<td>2</td>
<td>4.6</td>
<td>1835-1830</td>
</tr>
<tr>
<td></td>
<td>Ind. Blue Dec.</td>
<td>2</td>
<td>1.3</td>
<td>n.d.</td>
</tr>
<tr>
<td></td>
<td>Ind. Red Dec.</td>
<td>1</td>
<td>3.4</td>
<td>n.d.</td>
</tr>
<tr>
<td></td>
<td>Makers Mark</td>
<td>1</td>
<td>8.6</td>
<td>1795-1830</td>
</tr>
<tr>
<td></td>
<td>Sponge Print, Blue</td>
<td>1</td>
<td>1</td>
<td>1835-1830</td>
</tr>
<tr>
<td></td>
<td>Transfer Print, Flow Blue</td>
<td>1</td>
<td>4.1</td>
<td>After 1845</td>
</tr>
<tr>
<td></td>
<td>Transfer Print, Flow Blue/Molded</td>
<td>1</td>
<td>2.2</td>
<td>After 1845</td>
</tr>
<tr>
<td>Porcelain</td>
<td>Gilt Band</td>
<td>4</td>
<td>10.6</td>
<td>1880-present</td>
</tr>
<tr>
<td>White</td>
<td>Annular, Black and Olive</td>
<td>1</td>
<td>0.3</td>
<td>1820-1850</td>
</tr>
<tr>
<td></td>
<td>Annular, Blue and Red</td>
<td>1</td>
<td>0.7</td>
<td>1820-1850</td>
</tr>
<tr>
<td></td>
<td>Annular, Brown and Green</td>
<td>1</td>
<td>0.6</td>
<td>1820-1850</td>
</tr>
<tr>
<td></td>
<td>Blue Edgeware</td>
<td>5</td>
<td>6.3</td>
<td>1795-1845</td>
</tr>
<tr>
<td></td>
<td>Carination</td>
<td>1</td>
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<td>1880-present</td>
</tr>
<tr>
<td></td>
<td>Decal</td>
<td>1</td>
<td>2.2</td>
<td>1880-present</td>
</tr>
<tr>
<td></td>
<td>Green Glaze</td>
<td>4</td>
<td>14.9</td>
<td>20th century</td>
</tr>
<tr>
<td>Ware</td>
<td>Decoration</td>
<td>No.</td>
<td>Weight (g)</td>
<td>Date</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------</td>
<td>-----</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Hand Painted, Blue</td>
<td></td>
<td>2</td>
<td>1</td>
<td>1835-1855</td>
</tr>
<tr>
<td>Hand Painted, Blue and Red</td>
<td></td>
<td>5</td>
<td>3.5</td>
<td>1835-1855</td>
</tr>
<tr>
<td>Hand Painted, Floral</td>
<td></td>
<td>7</td>
<td>9.3</td>
<td>1830-1855</td>
</tr>
<tr>
<td>Hand Painted, Green</td>
<td></td>
<td>2</td>
<td>1.5</td>
<td>1830-1855</td>
</tr>
<tr>
<td>Hand Painted, Red</td>
<td></td>
<td>3</td>
<td>1.2</td>
<td>1805-1855</td>
</tr>
<tr>
<td>Hand Painted, Sprig</td>
<td></td>
<td>15</td>
<td>65.4</td>
<td>1835-1855</td>
</tr>
<tr>
<td>Ind. Blue Dec.</td>
<td></td>
<td>8</td>
<td>3</td>
<td>n.d.</td>
</tr>
<tr>
<td>Ind. Red Dec.</td>
<td></td>
<td>2</td>
<td>9.1</td>
<td>n.d.</td>
</tr>
<tr>
<td>Olive</td>
<td></td>
<td>1</td>
<td>0.6</td>
<td>n.d.</td>
</tr>
<tr>
<td>Sponge Print, Blue</td>
<td></td>
<td>4</td>
<td>11.7</td>
<td>1835-1860</td>
</tr>
<tr>
<td>Sponge Print, Blue and Red</td>
<td></td>
<td>1</td>
<td>0.1</td>
<td>1835-1860</td>
</tr>
<tr>
<td>Sponge Print, Green</td>
<td></td>
<td>9</td>
<td>6.8</td>
<td>1835-1860</td>
</tr>
<tr>
<td>Sponge Print, Red</td>
<td></td>
<td>2</td>
<td>1.2</td>
<td>1835-1860</td>
</tr>
<tr>
<td>Textured, Green Glaze</td>
<td></td>
<td>2</td>
<td>16.8</td>
<td>20th century</td>
</tr>
<tr>
<td>Transfer Print, Black</td>
<td></td>
<td>3</td>
<td>1.8</td>
<td>1820-1840</td>
</tr>
<tr>
<td>Transfer Print, Blue</td>
<td></td>
<td>26</td>
<td>78.7</td>
<td>1795-1820</td>
</tr>
<tr>
<td>Transfer Print, Flow Blue?</td>
<td></td>
<td>1</td>
<td>0.1</td>
<td>After 1845</td>
</tr>
<tr>
<td>Transfer Print, Flow Blue/Molded</td>
<td></td>
<td>1</td>
<td>0.6</td>
<td>After 1845</td>
</tr>
<tr>
<td>Transfer Print, Red</td>
<td></td>
<td>8</td>
<td>20.9</td>
<td>1835-1860</td>
</tr>
<tr>
<td>Yellow</td>
<td></td>
<td></td>
<td></td>
<td>1825-present</td>
</tr>
<tr>
<td>Brown and Clear Glaze</td>
<td></td>
<td>2</td>
<td>0.9</td>
<td>1825-present</td>
</tr>
<tr>
<td>Brown and Yellow Glaze</td>
<td></td>
<td>3</td>
<td>8.2</td>
<td>1825-present</td>
</tr>
<tr>
<td>Mochaware, Blue Band, Brown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wormy Pattern</td>
<td></td>
<td>1</td>
<td>24.4</td>
<td>1830-1850</td>
</tr>
<tr>
<td>Black Glaze</td>
<td></td>
<td>3</td>
<td>4.9</td>
<td>20th century</td>
</tr>
<tr>
<td>Ironstone</td>
<td></td>
<td></td>
<td></td>
<td>1840-present</td>
</tr>
<tr>
<td>Blue Band, Wormy Design</td>
<td></td>
<td>1</td>
<td>8</td>
<td>Recent?</td>
</tr>
<tr>
<td>Brown and Olive, Recent</td>
<td></td>
<td>77</td>
<td>160.9</td>
<td>Recent</td>
</tr>
<tr>
<td>Carination</td>
<td></td>
<td>7</td>
<td>29.5</td>
<td>n.d.</td>
</tr>
<tr>
<td>Decal</td>
<td></td>
<td>5</td>
<td>28.4</td>
<td>1880-present</td>
</tr>
<tr>
<td>Gilt Band</td>
<td></td>
<td>2</td>
<td>7.2</td>
<td>1880-present</td>
</tr>
<tr>
<td>Hand Painted, Blue Band</td>
<td></td>
<td>1</td>
<td>1.3</td>
<td>1840-present</td>
</tr>
<tr>
<td>Molded</td>
<td></td>
<td>1</td>
<td>6.4</td>
<td>1850-present</td>
</tr>
</tbody>
</table>

The 2010 assemblage contains many decorated types found in earlier years. As is consistent with the ware types, the main difference between the 2010 and earlier assemblages is in the higher proportion styles dating from the very late nineteenth century onward. Early (pre-Civil War) decorations included blue edgeware, handpainting, sponge printing, transfer printing
on pearl or white ware, and mochaware. Late nineteenth century decorations that extend into the twentieth century include gilt bands (on ironstone or porcelain) and decals. One interesting example of “recycled” decoration is an ironstone sherd with a wormy decoration first used in mochawares dating prior to 1850 (Figure 40c). This particular example could easily be from the late twentieth century. Brown and olive glazed ironstone sherds (Figure 40d) and black glazed yellow ware appear to have come from late twentieth century plates. Green sherds from a vessel with a flat bottom and wavy sides probably came from a twentieth century flower pot (Figure 40e).

**Coarse Earthenwares**

The coarse earthenwares, or crockery, were also catalogued using the criteria presented earlier (Schurr 2006, Secunda and Schurr 2005). Sherds were categorized by paste color, interior and exterior surface, and portion of the vessel. An inventory of the coarse earthenware sherds is given in Appendix 5.

The earliest types of coarse earthenwares were redwares, with pastes made of red colored clay that can range in color from light orange to dark red depending on the type of clay used and the firing conditions. Redware vessels were often vasiform crocks with rolled or everted rims. The redware vessels used at Collier Lodge exhibited a number of different exterior surface treatments, including plain surfaces, and glazes that include various shades of red (Figure 41a), dark brown (Figure 41b), and clear salt (Figure 41c). The lighter colored glazes are often somewhat transparent, and mottled glazes of a single color with a transparent background or of several colors are also found (Figure 41d shows a clear glaze mottled with red). Most of the redware sherds from Collier Lodge seem to predate the Civil War and therefore reflect the Eaton and Sawyer era occupations. However, the deposition of a vasiform redware crock with yellowish green glaze (Figure 42b) in the upper fill of Feature 25 suggests that redware vessels were probably in use during the late nineteenth and perhaps even into the early twentieth century at Collier Lodge.
Gray paste wares show a very narrow range of surface treatments. Exteriors are usually dark brown, often with salt or metallic glazes (Figure 41f). A few sherds bear a transparent salt glaze and some were decorated in blue (Figure 41e). The limited range of variation reflects the relatively small size of the gray paste collection and indicates increasing standardization of manufacture after the Civil War when these wares were most common.

The tan paste wares are probably the latest in the coarse earthenware series. Most sherds were very small. The only large examples were from what was probably a twentieth century planter (Figure 42a). Other sherds from this same vessel were recovered in previous years (Schurr 2011:Figure 124).

Figure 42. Large Coarse Earthenware Sherds.

As Table 9 shows, pre-Civil War redwares are most common numerically and by weight, followed by gray paste wares, wares with tan paste, and then by terra cota flower pot fragments.

<table>
<thead>
<tr>
<th>Paste Color</th>
<th>No.</th>
<th>Percent</th>
<th>Weight (g)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray</td>
<td>8</td>
<td>3.8</td>
<td>42.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Orange</td>
<td>98</td>
<td>46.4</td>
<td>703.9</td>
<td>74.1</td>
</tr>
<tr>
<td>Tan</td>
<td>19</td>
<td>9</td>
<td>117.7</td>
<td>12.4</td>
</tr>
<tr>
<td>Terracota</td>
<td>86</td>
<td>40.8</td>
<td>86.2</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>211</td>
<td></td>
<td><strong>950.5</strong></td>
<td></td>
</tr>
</tbody>
</table>

*White Clay Pipes*

White clay pipes are often found on nineteenth century sites as they were inexpensive and widely used. The Collier Lodge assemblage from 2010 contained bowl (n=9) and stem (n=7) fragments. Decorative elements found in 2010 largely repeat those found in prior years.
Decorative elements found in 2010 (Figure 43) include ribs (both parallel and crosshatched), stars, and floral elements on the bowl rim (Figure 43b-d) or stem/bowl junction (Figure 43h). One bowl fragment bears the maker’s mark of “T D” (Figure 43a) and another bears a portion of a “D” which could be from the same maker, but with the mark placed near the rim instead of centered on the bowl. The T D” mark was used throughout the nineteenth century when it was associated with a style of pipe and not a specific maker (Petruzelli 2002). Most stem fragments were from the middle portions of the stem, although one end with a slightly flared tip was collected (Figure 43g). As was the case for the pipe assemblages from earlier years, the designs were in use during the nineteenth century Martinez (1989).

Glass

Glass was first sorted by whether it was flat (window glass) or from a container (curved or an identifiable portion such as a base or a bottle neck) or any other kind of glass item (such as a bead or a light bulb). For each glass sherd, the color was described and any evidence of burning was noted. For flat glass, any unusually thin or thick pieces were also identified, and for container glass, the portion of the container was recorded, along with any other relevant information such as lettering, mold seams, etc. The glass inventory is given in Appendix 6.
Most of the glass sherds in the assemblage appear to date to the later part of the nineteenth century based on color and manufacturing methods (Lorrain 1968, Miller 2000). That presents a contrast to the fine earthenware assemblage and suggests that glass underwent different patterns of use, breakage and discard than earthenwares did. The most likely explanation is that glass was relatively rare in the region compared to other artifact types during the early nineteenth century.

Flat (Window) Glass

Flat glass sherds possessed a variety of tints (Table 10). Tints range from very light green to colorless. Sherds with green tints are the most common variety of flat glass (79.7 percent of the flat glass assemblage). Glass dating to the early nineteenth century tends to have a light green tint because of impurities in the materials used to make it. The 2005-2009 assemblages contained flat glass sherds of amethyst colored and amber glass. Those colors were not found in 2010. Most of the flat glass probably came from late nineteenth or early twentieth century building windows, although some fragments of automotive safety glass and a few possible mirror fragments are also present. Aqua glass fragments could have come from late nineteenth century paneled bottles. One piece of window glass bears dark green paint, suggesting that trim color was in use at the site at one time.

<table>
<thead>
<tr>
<th>Color</th>
<th>Number</th>
<th>Percent</th>
<th>Weight (g)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqua</td>
<td>12</td>
<td>2.9</td>
<td>10.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Aqua, Light</td>
<td>127</td>
<td>30.2</td>
<td>193.2</td>
<td>31.9</td>
</tr>
<tr>
<td>Aqua, Very Light</td>
<td>5</td>
<td>1.2</td>
<td>1.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Colorless</td>
<td>54</td>
<td>12.9</td>
<td>46.5</td>
<td>7.7</td>
</tr>
<tr>
<td>Frosted</td>
<td>1</td>
<td>0.2</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>Green, Light</td>
<td>153</td>
<td>36.4</td>
<td>232.4</td>
<td>38.4</td>
</tr>
<tr>
<td>Green, Very Light</td>
<td>68</td>
<td>16.2</td>
<td>122.3</td>
<td>20.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>420</td>
<td>605.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Container and Other Glass

The great majority of non-flat glass items were fragments from containers (Table 11), primarily bottles or unspecified containers (unspecified because the sherd was too small to indicate what kind of a container it came from). In addition to bottles, identifiable containers included jars, drinking glasses, and fragments from one vase. Other glass items include things used for clothing or adornment (16 buttons, one bead, and one item that could have been a fragment of a bead or a button), lighting (kerosene lamp chimney or light bulb fragments), one cat’s eye marble, a glass tube of unknown function, and one mirror fragment that still bore traces of its reflective backing. The most numerous types of rims are either the continuous thread finish that first appeared in 1919 (Miller 2000), or crown bottle necks made by an automatic
bottling machine (produced after 1892), indicating much of the glass assemblage dates to the twentieth century. None of the bases bore pontil marks, indicating all date after 1857 when the snap case mold came into use.

Table 11. Types of Glass Artifacts

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
<th>Percent</th>
<th>Weight (g)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead or button</td>
<td>1</td>
<td>0.2</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Bead, faceted</td>
<td>1</td>
<td>0.2</td>
<td>0.4</td>
<td>0</td>
</tr>
<tr>
<td>Button</td>
<td>16</td>
<td>3.5</td>
<td>11.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Bottle</td>
<td>26</td>
<td>5.7</td>
<td>409.2</td>
<td>38.8</td>
</tr>
<tr>
<td>Container, unspecified</td>
<td>323</td>
<td>71</td>
<td>476.3</td>
<td>45.1</td>
</tr>
<tr>
<td>Drinking glass</td>
<td>45</td>
<td>9.9</td>
<td>60.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Tube</td>
<td>1</td>
<td>0.2</td>
<td>0.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Jar</td>
<td>4</td>
<td>0.9</td>
<td>57.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Lamp chimney</td>
<td>1</td>
<td>0.2</td>
<td>0.3</td>
<td>0</td>
</tr>
<tr>
<td>Light bulb</td>
<td>50</td>
<td>11</td>
<td>26.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Marble</td>
<td>1</td>
<td>0.2</td>
<td>5.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Mirror</td>
<td>1</td>
<td>0.2</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Vase</td>
<td>1</td>
<td>0.2</td>
<td>5.5</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>471</strong></td>
<td></td>
<td><strong>1055</strong></td>
<td></td>
</tr>
</tbody>
</table>

Non-flat glass colors were less diverse in the relatively small 2010 assemblage (Table 12) compared to the 2006-2009 assemblage (Schurr 2011:Table 16). The limited range of colors can probably be best explained by the smaller size of the assemblage.

Early nineteenth century glass was usually had a green or yellowish-green tint from impurities. Dark olive glass sherds appear to have come from bottles and some could date to the first half of the nineteenth century. Most of the olive green sherds are lighter in color than what is typical for early olive glass and probably represent various types of green bottles from the twentieth century. After the Civil War, new colors were introduced and the glass was of greater purity and higher quality. As can be seen in Table 12, a variety of colors were used. Light green container glass sherds could represent some early nineteenth century bottle fragments, based on color, but most appear to be relatively recent in date. By color, some of them grade into sherds described as light aqua, a color that appears in Mason jars after 1858 and in Putnam lightning stopper jars manufactured after 1882 (Schurr 2006). The clear and amber sherds probably date to the twentieth century and make up almost half of the assemblage. Amber glass is primarily represented by beer bottle fragments, most of which seem relatively recent according to the type of bottle bases that are present in the assemblage.
Table 12. Non-Flat Glass Colors

<table>
<thead>
<tr>
<th>Color</th>
<th>Number</th>
<th>Percent</th>
<th>Weight (g)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amber</td>
<td>46</td>
<td>10.2</td>
<td>180.6</td>
<td>16.6</td>
</tr>
<tr>
<td>Amethyst</td>
<td>13</td>
<td>2.9</td>
<td>27.4</td>
<td>2.5</td>
</tr>
<tr>
<td>Aqua</td>
<td>41</td>
<td>9.1</td>
<td>81.3</td>
<td>7.5</td>
</tr>
<tr>
<td>Blue, Dark</td>
<td>1</td>
<td>0.2</td>
<td>0.4</td>
<td>0</td>
</tr>
<tr>
<td>Brown</td>
<td>1</td>
<td>0.2</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Colorless</td>
<td>225</td>
<td>49.7</td>
<td>358.65</td>
<td>33</td>
</tr>
<tr>
<td>Frosted</td>
<td>54</td>
<td>11.9</td>
<td>56.55</td>
<td>5.2</td>
</tr>
<tr>
<td>Green</td>
<td>7</td>
<td>1.5</td>
<td>11.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Green, Light</td>
<td>35</td>
<td>7.7</td>
<td>249.2</td>
<td>22.9</td>
</tr>
<tr>
<td>Green, Very Light</td>
<td>18</td>
<td>4.0</td>
<td>90.5</td>
<td>8.3</td>
</tr>
<tr>
<td>Olive</td>
<td>10</td>
<td>2.2</td>
<td>28.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Yellow, Pale</td>
<td>1</td>
<td>0.2</td>
<td>3.2</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>452</td>
<td>1088</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bottle necks are either machine manufactured or finished with a lipping tool (Figure 44a-d) using technologies common in the late nineteenth and into the twentieth century. No folded or applied rims from the early to mid-nineteenth century were found in 2010. Other glass sherds include rims from what could be a large lamp chimney (Figure 44e) and pieces of a thick-walled, faceted drinking glass (Figure 44f). Other glass items include a faceted blue glass bead (Figure 44g) that dates to the early nineteenth century. Similar beads have been found on late Removal period Potawatomi sites (Bollwerk 2006). An orange cat’s eye marble (Figure 44i) was probably lost during the second half of the twentieth century. A broken brown glass button fragment (Figure 44h) may have had a pin shank and probably dates from the late nineteenth century onward.
Four-hole glass white buttons (a typical example shown in Figure 45a) are the most common type of glass button. Most have smooth faces but at least one button fragment (Figure 45g) exhibits molded dots around the edge). Other button colors include white with blue speckles (Figure 45h), black (Figure 45i), blue on white (Figure 45j), and pink lustre (Figure 45k).
**Metal**

Metal is very abundant at the site (Appendix 7). Table 13 lists the relative abundance of different types of metal artifacts by number and weight, sorted from most to least abundant (by weight). Iron artifacts are by far the most abundant, followed by lead, then brass, and what is probably tin or zinc. Aluminum and copper fragments were relatively rare, as were chromed or gilded items (only one example of each). Three coins were also collected. Redundant or non-diagnostic metal artifacts (such as nail fragments, wire nails, rusted iron blobs, etc.) were identified, counted, weighed, and discarded. Those objects were not given catalog numbers.

The metal artifacts reflect the diverse array of activities that occurred at the site. Fishing is represented by fragments of tackle, hooks, lead sinkers, and links from a stringer chain. Food preparation items, such as fragments of an aluminum pan and a steel can opener, were mainly from the twentieth century. Food service items include a brass teaspoon (labeled “400 GR Plate”), an iron fork frag, and a white enameled steel cup, and table knife fragments. Food storage is primarily represented by fragments of iron cans (n=219) in the form of sheet iron, seams, and lips, but beverage consumption is also well-represented by crown bottle caps (n=26, some with plastic liners) and aluminum pull tabs (n=11, from the 1960s and 1970s).

Table 13. Metal Abundances

<table>
<thead>
<tr>
<th>Metal</th>
<th>Number</th>
<th>Percent</th>
<th>Weight (g)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>1549</td>
<td>87.1</td>
<td>7,293.9</td>
<td>90.6</td>
</tr>
<tr>
<td>Lead</td>
<td>30</td>
<td>1.7</td>
<td>449.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Brass</td>
<td>93</td>
<td>5.2</td>
<td>129.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Tin or Zinc</td>
<td>51</td>
<td>2.9</td>
<td>106.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Aluminum</td>
<td>48</td>
<td>2.7</td>
<td>35.2</td>
<td>.4</td>
</tr>
<tr>
<td>Copper</td>
<td>2</td>
<td>.1</td>
<td>22.7</td>
<td>.3</td>
</tr>
<tr>
<td>Coin</td>
<td>3</td>
<td>.2</td>
<td>11.2</td>
<td>.1</td>
</tr>
<tr>
<td>Chromed</td>
<td>1</td>
<td>.1</td>
<td>2.1</td>
<td>0</td>
</tr>
<tr>
<td>Gilded</td>
<td>1</td>
<td>.1</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,778</td>
<td></td>
<td><strong>8,051.4</strong></td>
<td></td>
</tr>
</tbody>
</table>

The domestic activity of sewing is shown by straight pins (n=13), a brass thimble (Figure 46a), and what appears to be a brass heel plate from a shoe (Figure 46c). Clothing fasteners are represented by rivets (Figure 46b) that probably came from denim clothing such as jeans or overalls and brass buttons (Figure 45l and m) dating to the nineteenth century. Small shanked brass buttons with molded designs similar to the one depicted in Figure 45l have been found on Removal period Potawatomi sites in the region (Bollwerk 2006).

Childhood artifacts include a small cast iron toy clothes iron (Figure 46e) that was probably a girl’s toy from the nineteenth century, a red cast toy car (Figure 46d, a Tootsie Corvette convertible that was probably manufactured in the 1950s based on the body style), and
an aluminum toy coin (Figure 46f, labeled “Uncle Sam 1960 Play Dime”). A link from a bicycle chain could be interpreted as an additional toy or of transportation.

Furniture parts were rare, consisting only of a possible drawer pull and a small strike plate from a lock. Zinc or tin sheet fragments may have been used as flashing on a zinc-covered counter.

Fasteners were relatively common, especially nails. The assemblage includes cut nails (n=20) and fragments (n=80) from the nineteenth century, wire nails (n=28) and fragments (n=69), cut (n=3) and wire (n=3) tacks, one wire fence nail, one horseshoe nail, and one thumbtack.

There were also many miscellaneous items such as a door stop, key rings, fragments of springs, iron washers and two railroad spikes. Lighting is represented by a brass light bulb base that was probably automotive. Iron strap fragments (n=25) served unknown functions, although several with nails in were probably straps from a wooden bucket. Iron wire fragments include possible bail fragments and probably some fence wire as well. An iron hammer was the only tool found.
Coins are especially useful because they bear dates. The three coins were collected in 2010 include two recent ones (a 1973 penny and a 1980 nickel) and one nineteenth century coin (an 1893 “Indian Head” penny) from the topsoil south of the Lodge.

**Brick and Mortar**

Brick and mortar are typically found in abundance at Collier Lodge, as shown in Appendix 8. Brick fragments were recorded by piece-plotting each large fragment and measuring its dimensions (length, width, and thickness) if enough of the brick was present to record any dimension. The fragment location and attributes were recorded on a “Brick Record” form. Most brick fragments were discarded on-site, although a few were retained to provide representative samples. Fragments that did not maintain measurable dimensions were recorded by count and weight. Two types of mortar were seen, a soft, sandy type that was probably used first, and a harder type that was probably used later. Concrete fragments include fragments that were probably part of the floor of the garage that once stood to the east of the lodge. Others were from hollow-core concrete blocks that were mainly found near the lead pipes on the south of the Lodge.

One hand struck brick fragment bore what appears to be a maker’s mark consisting of an impressed equilateral triangle (Figure 47). Hand-struck brick was most common between 1830 and 1860 (Mansberger 1981 citing, Stelle 2001). This is a possible clue to the identity of brick maker, although to date no record of such a mark has been located in historic records. It may also be an indication that the builder was a member of the fraternal order of Freemasons because the equilateral triangle is well-known to be one of the many symbols used by the Masons.

![Figure 47. Triangular Mark on Hand Struck Brick.](image-url)
Faunal and Floral Remains

Faunal Remains

By the end of 2009, the faunal assemblage consisted of over 27,800 fragments of bone and shell weighing over 18.5 kg (Appendix 9). The 2010 investigations added an additional 2,932 fragments weighing 1.9 kg. Dr. Terrance J. Martin at the Illinois State Museum presented a half-day workshop on faunal identification at the site. Animal bones identified during the workshop included species typically present with domesticates such as cow, swine, and chicken and wild species such as deer, raccoon, and various types of turtles. Unusual taxa that had not been identified before included passenger pigeon (Ectopistes migratorius) badger (Taxidea taxus), and a small mustelid, possibly fisher (Martes pennant) or martin (Martes pennant).

Worked Bone and Shell

The only worked bone and shell items found in 2010 were historic buttons. These include large (Figure 45a) and small (45b) four-hole buttons. Several different patterns of four-hole bone or shell buttons were also found (Figure 45c-e). No prehistoric bone or shell artifacts were found in 2010.

Floral Remains

Because of the temperate climate of the upper Great Lakes region, floral remains are usually only preserved over long periods of time when they are carbonized. Numerous samples of carbonized plant remains were collected. These include three flotation samples that are being curated for future analysis by a professional paleoethnobotanist. The contexts that produced flotation samples are listed in Appendix 1. The flotation samples are from feature contexts and may provide information about the local environment and the types of plants that were used during the prehistoric period. They may also be suitable for radiocarbon dating. In addition to flotation samples, charcoal was also collected during screening. These tend to be wood charcoal larger than ¼ inch in size. During screening, any charcoal fragments that were collected were placed into a foil pouch. The charcoal samples were then allowed to dry in the lab in opened packets and weighed. The inventory of charcoal samples is given in Appendix 10. Over 7.5 kg charcoal samples were collected from 184 contexts. The charcoal samples collected by screening may date to any period in which the site was used, and can provide information about wood use at Collier Lodge. The charcoal samples also have the potential to provide radiocarbon dates. Unfortunately, coal was also abundant at the site, and therefore radiocarbon samples might give unreliable results if coal has contaminated the wood charcoal, which is especially likely for samples of mixed coal and charcoal. In addition wood charcoal, unburned coal and coal slag (or “clinkers) were also collected.

Rocks and Minerals

The Collier Lodge site is located within the Kankakee Valley Outwash and Lacustrine Plain (Schneider 1966). The valley was formed by glacial outwash at the start of the Holocene. The geological formation processes of the valley determined the kinds of lithic resources
available in the vicinity of the site. The local bedrock lies buried below a deep mantle of unconsolidated material deposited by flowing water. Sediments near the surface in the Kankakee Valley are relatively fine grained, showing they were deposited in a relatively low energy environment. Thus, large boulders are scarce and most rocks are relatively small and have been crushed or rounded by glacial and fluvial reworking. Although relatively small in size, they are extremely variable in type, representing cobbles derived from many different kinds of parent materials. There were no bountiful sources of high quality chert located nearby that could be used by the site’s prehistoric inhabitants. The local source of chert consists of chert nodules that were transported into the region by glacial activity. Glacial chert cobbles are usually heavily patinated and often contain fracture lines that create unpredictable breaks during knapping. Glacial cobbles are also extremely hard, as they are the survivors of a very destructive process. These characteristics make them extremely difficult to work with. The use of hard glacial cobbles is reflected in the large number of very small flakes and small core fragments found at the site, many of which were probably produced by bipolar reduction (see above).

The assemblage from Collier Lodge contains some rocks (inventoried in Appendix 11), some of which were probably used by people at the site, and others that just happen to occur in the area and do not have any cultural significance. Rocks with adhering mortar may have actually been concrete aggregate. Fire cracked rock (FCR) was the most abundant lithic artifact present at the site. Over 1740 individual pieces were catalogued with a total weight of 20.0 kg. The hard stone FCR was supplemented with 761 pieces of burnt limestone weighing 5.75 kg.

Conclusions

In total, seven units with a total surface area of 16 m² were opened in 2010, sampling about 1.7 percent of the 960 m² core area of the site midden as defined by the resistivity surveys. Four of the units explored portions of Feature 25, the presumed cabin cellar pit, and were mainly placed to determine the dimensions of the feature. The units were successful in locating the eastern edge of the feature, and perhaps its northwest corner, but its western edge could not be defined because of extensive historic disturbance south of the Lodge. An additional unit located two Upper Mississippian features at the northern end of the site. The features were similar to those reported from Griesmer site in Lake County, Indiana (Faulkner 1972) and represent the remains of a temporary camp site used to process marsh resources. No features from earlier time periods were identified.

The following activities were completed in 2010:

1. Ground penetrating radar (GPR) surveys were conducted south of the Lodge. They were primarily successful at detecting the extensions of the lead sewer pipes running to the southeast of the Lodge found during the 2008 and 2009 excavations.

2. Opened units adjacent to previously opened units in order expose the full extent of Feature 25.
a. Unit E 81-83 N 85-86 was opened to determine the southern edge of Feature 30 (a dense deposit of early twentieth century rubbish) and perhaps the southern corner of Feature 25. Feature 30 extended only about 25 cm into the unit and was completely removed by Level 7 where the eastern edge of Feature 25 was clearly visible in the floor.

b. Unit E 81-83 N 77-78 was opened to explore the northern extent of Feature 30 and to further investigate Feature 33, a bark-lined pit filled with mortar or ashy material that was visible in cross-section in the north wall of Unit E81-83 N 76-77 (excavated in 2009). The unexcavated northern half of the feature corresponded with a prominent GPR anomaly. The 2010 excavation showed that the GPR anomaly was produced by an iron railroad spike in Feature 33 and that the feature was probably an historic period bark-lined pit used to mix plaster. The mortar flecks and large brick fragments in the western end of the unit were part of Feature 30. Seven levels were excavated in this unit and the final floor looked very similar to that of Unit E 81-83 N 77-78.

c. Unit E 74-76 N 83-85 was placed to the south of the Lodge to look for the southwest corner of Feature 25. The search was unsuccessful because the area was badly disturbed by drainage pipes from the Lodge.

d. Unit E 80-82 N 89-91 was placed over the approximate location of the northeast corner of Feature 25. Excavation proceeded slowly in this unit because of its relatively large size and complex deposits which consisted of a confusing array of soil lenses of different sizes and soil types. These were eventually determined to have been associated with soil disturbance produced by the placement of the concrete foundation of a garage that stood in this part of the site, as revealed by the rectangular trench that was a footer trench for the foundation). Seven levels were excavated. The floor of Level 7 contained a rectangular patch of dark soil in the southwest corner of the unit that could be the northeast corner of Feature 25, but that was not confirmed because the season ended before another level could be excavated. A semi-circular patch of reddened soil near the southeast corner of the unit could be an Upper Mississippian pit.

e. Unit E 84-86 N 92-94 was placed adjacent to a unit from an earlier season (E 82-84 N 92-94) that had produced undisturbed Upper Mississippian roasting pits. Very quickly (by the end of the second level), the new unit contained soil stains characteristic of prehistoric pits along with the eastern edge of the earlier unit. It was found that the location of the new unit was about 20 cm too far to the west compared to the earlier unit. One pit (Feature 44) was relatively small and shallow with no evidence of in situ burning. The other (Feature 43) was bisected by the south wall of the unit to produce a beautiful profile of a classic Upper Mississippian roasting pit (see above).

f. Units E 79-80 N 86-87 and E 80-81 N 86-87 were opened when spare labor was available during the July field season and on August 28 to demonstrate excavation during the Aukiki River Festival. These units produced the typical early twentieth century rubbish characteristic of the upper levels of Feature 25. They were excavated to create some working room that would facilitate a deeper test of Feature 25 in the future.
Except for some unusual exotic historic artifacts such as a cast car, a toy clothes iron, and a marked brick, the artifact assemblage was similar to those from prior years. Prehistoric artifacts from the Archaic through the Upper Mississippian period were collected, along with abundant historic materials dating to the nineteenth and twentieth centuries. Unlike previous seasons, no Fur trade era artifacts from the seventeenth or eighteen centuries were found.
References Cited

Ball, Stephen (editor)  
2011 *Investigations at the Heaton Farm Site (12GR122): A Fifteenth Century Village in Greene County, Indiana*. Research Reports, No. 19. Glenn A. Black Laboratory, Indiana University, Bloomington.

Bollwerk, Elizabeth  

Faulkner, Charles H.  

Justice, Noel D.  

Lorrain, Dessamae  

Mangold, William L., and Mark R. Schurr  

Mansberger, Floyd R.  

Martinez, Charles H.  

McCullough, Robert G.  

Miller, George L.  
Munsell Color

Munson, Patrick J.

Petruzelli, Renee

Schneider, A. F.

Schurr, Mark R.

Schurr, Mark R.
2006 *Archaeological Investigations at the Collier Lodge Site (12PR36)*. Report 2006-1. Archaeology Laboratory, Department of Anthropology, University of Notre Dame, Notre Dame, Indiana.

Schurr, Mark R.
2011 *Archaeological Investigations at the Collier Lodge Site (12PR36): The 2006 through 2009 Field Seasons*. Archaeology Laboratory, Department of Anthropology, University of Notre Dame, Notre Dame, Indiana.

Secunda, William B., and Mark R. Schurr

Stelle, Lenville J.