

**Under White Haven:
An Archeological Overview and Assessment of
Ulysses S. Grant National Historic Site, St. Louis, Missouri**

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Midwest Archeological Center
Technical Report No. 89

United States Department of the Interior
National Park Service
Midwest Archeological Center
Lincoln, Nebraska

2004

This report has been reviewed against the criteria contained in 43CFR Part 7, Subpart A, Section 7.18 (a) (1) and, upon recommendation of the Midwest Regional Office and the Midwest Archeological Center, has been classified as

Available

Making the report available meets the criteria of 43CFR Part 7, Subpart A, Section 7.18 (a) (1).



Abstract

This archeological overview and assessment for Ulysses S. Grant National Historic Site describes the multiple episodes of archeological investigation that began in the park in the 1990s. The assessment discusses what is known about the park's archeological resources and the potential for future research in the park and at sites related to the Dent and Grant occupations in the surrounding area. The overview and assessment concludes with a series of recommendations for future archeological investigations, including a parkwide geophysical remote sensing inventory.

Acknowledgments

The development of this overview and assessment was significantly enabled by a number of people. We thank the staff of Ulysses S. Grant National Historic Site for their assistance and courtesy during our visits to the park and for answering our many questions. In particular, we thank Site Manager Michael Ward, Historian Pam Sanfilippo, Curator Karen Miller, Chief of Interpretation Chris Eckard, former site manager Jill O'Bright, and Regional Historic Architect Al O'Bright for their help and graciousness, and for their comments on earlier report drafts.

Thomas Thiessen of the Midwest Archeological Center provided advice and acted as a sounding board on many occasions. Jan Dial-Jones provided Ms. Roberts time from her busy schedule with the collections management team to participate in the development of this work. Carrol Moxham and John Andresen ensured this document met the usual high standards of the production team.

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Chapter 1: Introduction

Known by the name White Haven, and more recently as the Dent–Grant home, Ulysses S. Grant National Historic Site (ULSG) was once part of the property of Frederick Dent, father-in-law to Ulysses S. Grant. The Dent farmstead (Figure 1) was a large property encompassing hundreds of acres at its zenith, now about 9.5 ac (3.8 ha). White Haven, which includes the Main House (HS-1) and several associated outbuildings, has undergone a long-term process of architectural documentation and building restoration that has included several archeological investigations.

This archeological overview and assessment addresses several management issues by:

- (1) defining the park archeological resource base;
- (2) determining resource significance;
- (3) suggesting and recommending archeological research priorities; and
- (4) identifying park areas where archeological resources are likely or unlikely to be intact and/or have integrity.

Various park records were consulted to assess the archeological resources at Ulysses S. Grant National Historic Site. These consist of field notes and completion reports collected from 1991 to the present that are currently housed at the Midwest Archeological Center. Other relevant information includes project specific memoranda contained in the park administrative files under file codes H-22, cultural resource studies and research, and H-24, archeological and historical data recovery programs. A file search was also conducted at the Missouri State Historic Preservation Office site files at the Department of Natural Resources offices in Jefferson City, Missouri.

This document lists, describes, and assesses previous archeological investigations. Following the summaries of archeological remains given in Chapter 4, specific recommendations are presented in Chapter 5 for archeological resource management of the site and its environs. The interpretive potential of archeological remains is evaluated and park research priorities are suggested. To enhance park management efficiency and to implement park landscape development, a program of additional archeological work is recommended.

Brief Description of Ulysses S. Grant National Historic Site

White Haven is located in St. Louis, Missouri (Figure 2), in part of Section 16, Township 44N, Range 6E, as well as all of Survey 9 (Figure 3). The latter tract is retained from early Spanish claims platted in the area and does not conform to the township and range system established by the Northwest Ordinance of 1796. As depicted on the 1979 USGS 7.5-minute Webster Groves quadrangle map, UTM coordinates for the property are Northing 4270020 to 4270200, Easting 730800 to 730660 (Zone 15). The site covers approximately 9.5 ac (3.8 ha). White Haven is referred to as “Grant’s Home” in the files of the Archaeological Survey of Missouri, which assigned it site number 23SL765. The site was mistakenly assigned a second site number (23SL857) in 1992. The preferred designation is 23SL765/857 to denote the two site number assignments.

The site lies largely between 510 and 520 ft amsl, though the western limits fall to the 500-ft contour. The site can be characterized as a dissected uplands hilltop. Gravois Creek, which drains from the northwest toward the southeast through this area, represents the major source of fresh water near White Haven, the center of which lies approximately 200 m east. A small ephemeral stream skirts the current northwest boundary of White Haven and empties into the perennial Gravois Creek. Furthermore, a spring, which was known as Prairie Spring, was exploited by the Dent family and exists on the property.

The White Haven property and its historic structures are not oriented due north; rather, they are oriented roughly northwest to southeast. The park has defined an architectural (or grid) north, which is 302 degrees. Throughout this report, compass and cardinal directions are given in relation to architectural north.

There are seven buildings on the property (Figure 4), five of which date to the Dent–Grant occupation. At the crest of the hill sits White Haven’s Main House (HS-1), which is a two-story frame structure now restored to its mid-nineteenth-century appearance. Adjacent and to the north of the Main House is a massive structure known as the Stone Building (HS-2), which is reputed to have been a slave cabin and has been determined to have served as a summer kitchen (Scott 2001a), a configuration to which it was restored between 1999 and 2001. Although HS-2 was originally named the Stone Building (O’Bright 1999), it is referred to hereafter as the Summer Kitchen because this name is more descriptive and the implied function is now fairly certain.

The large historic Barn (HS-3) stands next to the west property line near the commonly used entrance to the site. That building, however, originally stood southeast of its current location along with several minor dependencies, such as a corncrib. It is likely that construction of a subdivision to the south of that complex demanded the Barn’s relocation and razing of the several associated structures. This structure is sometimes referred to alternately as the 1868 Barn and the Grant Barn to distinguish it from the ca.-1818 barn usually referred to as the cow barn.¹

Behind the Main House, generally toward the north, are two outbuildings that stand side-by-side on the slope leading down to the ephemeral stream that demarcates the north property line. One is designated the Ice House (HS-4), which might have been used as a smokehouse; the other is designated the Chicken House (HS-5).

A structure known as the Cottage dates from the early part of this century. Built as a caretaker’s house about 1914, the building lies between the relocated Barn and the Main House at the base of the hill. It was originally a bungalow with one and a half stories and a north-facing porch. The top floor was destroyed by fire during World War II. The house was later remodeled as a one-story dwelling and converted to a rental property. During the remodeling, which took place during or just after World War II, a breezeway and garage were added to the building. A bedroom wing was added in the 1970s. On the east side of the Cottage there is a cistern thought to date to the nineteenth century based on construction style (O’Bright 1999:7.9). It was used as a water source until the early part of the twentieth century.

Although not associated with the White Haven’s designated historic period, the Cottage is used as the administrative headquarters for the site. It was demolished as part of a new visitor center and administrative office development in 2003.

A seventh structure was constructed on the grounds in 1998. The brick building, located upslope and architecturally east of the Main House (HS-1), was designed to be compatible with both the historic setting of the park and the surrounding suburban neighborhood. The 1998 building serves as the park maintenance facility and office.

Several minor site amenities, including two circular holding ponds used to cool parts of the Main House in the years immediately preceding modern air conditioning, once existed near the Main House. In addition, a flagpole and a standard for either a sundial or birdbath were located just west of the Main House. These features were documented and removed during the restoration process of the 1990s.²

¹ The convention followed here is that the names of formally designated historic structures such as the Main House and the Barn (O’Bright and Marolf 1999) are capitalized, whereas the names of structures lacking formal historic structure designation by number, such as the the cow barn and the shed, are not capitalized. An exception is the caretaker’s house, which does not have historic structure status, but is commonly known as the Cottage.

² Other numbered historic structures are: Flagstone Walkway, HS-6; Main House Cistern, HS-7; Driveway, HS-8; and Barn Well, HS-9.

Chapter 2: Environmental Setting

Ulysses S. Grant NHS is located on a terrace above Gravois Creek, a tributary of the Missouri River. Mississippian-era geologic deposits, including formations of St. Louis limestone, Salem and Warsaw formations (Anderson 1979), underlie this portion of Gravois Creek. Warsaw materials characteristically exhibit interbedded shales and limestones that are subject to karst formation. In geologic terms, loess has recently been deposited across the area. Eolian in origin, this fine-grained material was created by the continuous action of glaciers and deposited by wind action. Thin lenses of loess exist on relatively flat hilltops and as colluvium on valley floors.

Topographically the area surrounding Ulysses S. Grant NHS consists of rolling uplands dissected by the existing (and former) drainages. The area is an active floodplain. A soil survey by the Soil Conservation Service (Benham 1982) shows six detailed soil units in the Gravois Creek. The site sits on the silt loam category soils. It is characterized as nearly level, moderately to well drained, and flood prone (Benham 1982:35).

In early history, vegetation along Gravois Creek consisted of prairie, with forests skirting creekways (Benchley 1976:7,11). Areas north were also prairie. Just south of the drainage lies the northern Ozark border, beginning at the Meramec River. At least two sorts of vegetal zones were near Gravois Creek. Mining, agricultural usage, lumbering, road and residence construction, and general urbanization have modified the vegetative cover, such that only pasture grasses, shrubs, and woodlands now cover the area.

Prehistoric Chronology of the Area

A broad view of the cultural chronology of the St. Louis area was developed in Chapman (1975:7; Benchley 1976; Weston and Weichman 1987; Harl 1995) and is abstracted here. The St. Louis area has long served as a natural transportation route. Evidence of the earliest human use of the area begins around 12,000–8,000 BC with the Paleoindian era. Sites dating this early or even isolated projectile finds are not well represented in the area. Only rare finds of artifactual materials suggest the presence of populations in these times (Graham 1980:29, 49–50, 63).

The Dalton period (ca. 8000–7000 BC) is better represented in the archeological record. This was a period of transition from a subsistence strategy focused on nomadism and utilization of megafauna to one of hunter-forager traditions. It has been hypothesized that this transition was stimulated by a major climatic shift beginning around 7000 BC resulting in a general warming and drying trend. Their tool kits included fluted lanceolate points, snub-nosed scrapers, concave-based drills, bone tools, and Dalton Serrated points (Chapman 1975:105–107).

In the Early Archaic period (7000–5000 BC), as the warming trend accelerated, foraging became increasingly important in response to a longer growing season and expanded use of a wider range of the landforms and resources sought by these people. The artifact assemblages associated with Dalton-age sites reflect these changes in subsistence strategy. Tool kits of the earlier periods were adapted and modified through experimentation. Lanceolate points and Dalton Serrated blades continued to be used, but fluting disappeared. Rice Lobed points were added to the tool kit as were collecting tools and a wide variety of scrapers (Chapman 1975:127–129).

The next period of cultural development is the Middle Archaic (5000–3000 BC) that saw a continuation of adaptation to changing environments, one of the most notable of changes being the expansion of prairie areas. Base camps were located at the prairie-forest edge where three eoniches—woodlands, prairies, and riverine areas—could be intensively exploited. Several changes in the tool kit occurred during this period. Projectile points gradually reduced in size and side-notched types became common. Heat treatment of chert became an important part of the chipped-stone manufacturing process. Projectile points and knives were frequently modified in this manner. Full-grooved axes, celts, bone tools, and twined fabric appeared (Chapman 1975:158–159).

The foraging tradition culminated in the Late Archaic period (3000–1000 BC) as the warm dry climatic conditions reached a peak. This period was characterized by intensive exploitation of all available econiches. Regional preferences and specializations in resource exploitation developed. These regional adaptations are reflected in chipped-stone tool assemblages, which suggest that foraging was relatively important. Knives were larger, while dart points were smaller. Woodworking tools and grinding stones occur in a higher frequency than in earlier periods. This Late Archaic tool kit is the base upon which later Woodland period agricultural tool kits developed.

The Early Woodland period (1000–500 BC) is characterized by a refinement of the forager lifestyle. Sites tend to cluster along major riverways and their tributaries. Tool kits changed little in this period. The Middle Woodland period (500 BC–AD 400) appears to be part of a developing interregional trade network. Large centers developed throughout the Mississippi and Ohio River valleys. Contact with these centers brought exotic goods and ideas in to the area, one of which was the building of burial mounds and attendant ceremonial practices. Maize agriculture became more important. Organized villages and religious centers were established and elaborate pottery styles were developed. These communications and trade networks have been referred to as the Hopewell Interaction Sphere.

Near the end of the Middle Woodland and the beginning of the Late Woodland period (AD 400–900), regional interaction seems to have waned. The Late Woodland period was marked by few innovations. Sites devolved to a local community-based organization. Trade continued, but on a much reduced scale. Mounds and associated grave goods became less elaborate.

The Mississippian period began around AD 900 and continued until contact times in the 1600s. This cultural development has been referred to as the Village Farmer Tradition (Chapman 1980). Fortified villages and a dependence on maize agriculture characterized the major subsistence pattern during this time. Population increased dramatically during Mississippian times. Complex religious systems were formed or reformed and elaborate ceremonial centers developed. Mississippian-period projectile points were small and triangular; the pottery was tempered with crushed shell. Mississippian-age sites are rare in the Gravois Creek area.

Historical Background

Gravois Creek is a small creek now situated in suburban south St. Louis. This outlying area is primarily residential, secondary to the core of St. Louis. This suburban pattern has its roots in the early history of the Gravois area. The following historical sketch is drawn primarily from Noble (1997) and O’Bright and Marolf (1999).

Early Occupation

Under terms of a 1796 Spanish land grant, a Hugh Graham acquired a tract of nearly 800 arpents (680 ac) on Gravois Creek in what is now east-central Missouri but then a part of Spanish Upper Louisiana. Soon thereafter, Graham exchanged the land to James Mackay (spellings and pronunciations vary) in return for some of the latter’s holdings along the Missouri River. Mackay, it should be noted, was a prominent trader and entrepreneur of the eighteenth-century West.

Born in Scotland in 1759, Mackay emigrated to America in 1776 and then spent the next 15 years as a trader with the North West Company in Canada. He then moved to Missouri in about 1793 and soon returned to trading through the Spanish Commercial Company, sometimes known as the Missouri Company, making trade expeditions from 1795 to 1797. Afterwards he took appointment as commandant of the settlement of San Andres, located in the northwest part of what is now St. Louis County. In 1800 he married Isabella Long, a union that produced a great many descendants, many of whom achieved some historical prominence of their own. In later years, after transfer of the territory to the United States, Mackay served as a judge and also as a representative to the Territorial Legislature. He died in St. Louis in 1822 (Quaif 1916:187–188).

In 1808, Mackay sold some of his acreage on Gravois Creek to his brother-in-law, William Long. Long built a two-story frame house on the land, which he sold with improvements to Theodore Hunt in 1818. Frederick Dent, Grant's future father-in-law, bought the property from Hunt in 1820. William Long was responsible for the first construction at what is now ULSG. Long's third home still stands about 1.5 miles west of White Haven. Other contemporary structures are the Zepaniah Sappington home built in 1815 in a manner similar to White Haven and the Thomas Sappington home built in 1808. These homes are listed on the National Register of Historic Places, along with White Haven.

Dent–Grant Occupancy

Frederick Dent used the place primarily as a country retreat from the often-stifling summer heat of St. Louis, where he maintained his permanent residence. Despite its initial limited function, he made a number of improvements to the property, making it more suitable for his large family and eventually transforming it into a working plantation. Moreover, it was there at White Haven, as it became known, that an interesting chain of events brought his daughter Julia together with the future Civil War hero and U.S. president.

Grant's roommate at West Point, as it happens, was Dent's son Frederick (Fred). Upon graduation from the military academy in 1843, Grant's first assignment was at Jefferson Barracks, then well south of St. Louis but now surrounded by its urban sprawl. While there, he left the Barracks to call on the Dent family out of his high regard for young Frederick, a trip that would have taken him northwest 5 miles. It would appear that Grant was almost immediately taken with Fred's sister, Julia, for when his military company was to be transferred out in 1844 he proposed marriage. For her part, Julia doubtless was equally taken with the young soldier (Grant then aged but 22 years). However, it would be 1848 before Grant was able to win the hand of young Julia.

After their marriage, the Grants were stationed at posts in New York and then Michigan. They returned to Missouri and White Haven periodically, though, and it was at White Haven that their first son, Frederick Dent Grant, was born in 1850. When Grant received transfer orders for the West Coast in 1852, Julia and their sons returned to White Haven. She did travel to the Ohio home of Grant's parents during that period, however, giving birth to their second son, Ulysses, there.

Ultimately, the separation from his family over such great distances moved Grant to resign his military commission in 1854. He then returned to White Haven and lived for a while with his young family in the Main House. Soon thereafter they moved into Wish-ton-Wish, which was the house belonging to Julia's brother located elsewhere on the plantation.

While residing at Wish-ton-Wish, Grant began to farm 80 acres of White Haven land given to his wife, Julia, by her father. This at last provided Grant with the opportunity to build his very own domicile, a log structure he named Hardscrabble. Only a few months after its completion Julia's mother died, however, and they move back to the Main House. A log structure believed to be the house built by Grant was moved to Grant's Farm some years ago.

A depression in the farm market, an early June frost, and sickness in the family and among the slaves forced Grant to leave the farm in 1859. Dent and Grant agreed to sell 400 acres of the estate, including the land on which Hardscrabble stood. The Grant family then moved into the city where Ulysses formed a brief real estate partnership with Julia's cousin, Harry Boggs. As it turned out, Grant's end of the partnership was collecting delinquent accounts, a task that he found distasteful and difficult to do. Accordingly, with the nation heading toward civil war, Grant headed to Galena, Illinois, where he would work for a time in his father's store.

Grant did not hesitate to return to military service when the war came. During the opening years of the war he rose through the ranks, and his distinguished service eventually caught the eye of President Lincoln. Having struggled with one incompetent general after another, Lincoln appointed Grant to lead all the Union armies after approving his nomination to the rank of Lieutenant General, and Grant singularly honored the president's trust by leading the Union Army to victory over the Confederacy.

Grant's Acquisition and Loss of White Haven

It was during this period that Grant reaffirmed his devotion to his wife's family home, White Haven. Throughout the war years, whenever he had put aside sufficient funds, Grant would buy parcels of the Dent property to save it from creditors. Grant continued that practice after the war, and through his presidency, eventually accumulating the entire estate and several neighboring tracts. At its largest, White Haven encompassed over 750 acres.

As perhaps the greatest American war hero since Washington, Republican political brokers quickly seized upon him as the ideal person to pick up the torch from the fallen Lincoln, who was assassinated within a few days after the Confederate surrender. Certainly in their minds he had the makings of a formidable presidential candidate for the 1868 elections, more so at least than the incumbent, Andrew Johnson, who after all was a border state Democrat soon to be impeached.

As the nation's 18th president, however, his two terms in office were hardly distinguished. The sad fact is that the Grant administration was rife with scandal, though Grant himself tended to remain above the fray. He was, in essence, an honest man ill served by his advisors and political cronies.

During the presidential years, Grant continued to acquire land and make improvements on the grounds of White Haven. It would appear from those activities that Grant intended to ready the place for his retirement from public life. At the completion of his second presidential term, Grant left the country for a two and one-half year world tour.

Grant's last venture into the private sector proved to be unsuccessful. Indeed, the unscrupulous practices of his partner led to financial ruin for the firm, and Grant was left with a mountain of debt when his associate left the country. Grant would spend the rest of his remaining days trying to make good on those debts, selling off White Haven and completing his still important memoirs shortly before his death in 1885. The latter effort was particularly crucial in providing a steady income for his widow in a time before presidential pensions.

Over the next 100 years, occasional land sales pared away the property Grant had amassed about the Main House at White Haven. Furthermore, during the last 50 years, developers subdivided much of what was then left of the estate for residential construction. Thus, the remaining 9.65-ac (3.8 ha) plot is now bordered on three sides by modern single-family dwellings. To the west, across Gravois Creek, lies the former August Busch estate, now known as Grant's Farm, and a popular tourist attraction run by the Busch Foundation on lands also formerly owned by Grant.

Chapter 3: Previous Archeological Investigations

Archeological Investigations in the Gravois Creek Drainage

Several archeological investigations have taken place in the St. Louis area with over 1,000 archeological sites being known and recorded by the Missouri State Historic Preservation Office; however, only those in the Gravois Creek drainage are discussed here. A few cultural resource management studies have occurred near ULSG but not on the Gravois drainage (Browman, Horn, and Clark 1977; Browman 1980) others are in the immediate area of ULSG (Benchley 1976; Nixon, Hamilton, and Kling 1982; Nixon, Kling, and Harl 1982; Ott 2002). There are 10 reported prehistoric and historic age archeological sites recorded in the Gravois Creek area near ULSG.

One Dalton site may exist nearby. A truck farmer reportedly found a Dalton-style projectile point on the terrace of the Gravois Creek about 1.5 miles southeast of ULSG. The site is identified at the Truck Farm site in the Missouri State site records, but little else is known about it.

An Archaic/Woodland site is represented by one site on Gravois Creek, 23SL58. The site yielded one possible Archaic-period projectile point as well as Woodland-period projectile points and ceramics (Nixon, Kling, and Harl 1982:16). The site, a scatter of lithics and ceramics, is located about one mile southeast of ULSG in the Lakeshire subdivision area. The nearby site 23SL205 is described as a lithic scatter of unknown cultural affiliation. It is possible that site 23SL205 may be part of, or the same as, site as 23SL58. When 23SL205 was recorded, it is possible that a different element was visible due to earth removal activities that had taken place in the area (Nixon, Kling, and Harl 1982:18).

Another Woodland location is about ½ mile northwest of ULSG and is designated site 23SL59. It is situated on the first terrace of Gravois Creek. Several pieces of thin clay-tempered potsherds and stemmed bifacial lithics were found on this 2-ac (0.81 ha) campsite.

One Late Woodland site, 23SL57, is located on a ridge on the southwest side of Gravois Creek about ¾ mile southeast of ULSG. Late Woodland diagnostic artifacts found include cord-marked limestone tempered sherds and a hoe made from a large flake. Its presence suggests horticultural activities may have been carried out on the site.

Nixon, Kling, and Harl (1982) conducted an archeological inventory along Gravois Creek for the U.S. Army Corps of Engineers St. Louis District in anticipation of future flood-control projects that might affect archeological resources. They relocated several sites reported above and they found five additional sites within a mile of ULSG. Sites 23SL443, 444, and 445 are located northwest of Gravois Road and along the old railroad line and biking trail. Sites 23SL446 and 447 are located southeast of Gravois Road on the creek terraces. All are prehistoric in age. One historic trash dump, 23SL448, that dates in age from the mid-nineteenth to the early twentieth century was located over 2 miles to the southeast of ULSG. While contemporary in age with the Dent–Grant and later occupations of ULSG, there appears to be no significant connection to White Haven.

Site 23SL443 was located a few hundred yards downstream from 23SL59 and about ⅛ mile from ULSG. Nixon, Kling, and Harl (1982:37) describe 23SL443 as a light lithic scatter located in the Grant's Farm Clydesdale pastures. The site's age and cultural affiliation are unknown.

Located a little more than a mile northwest of ULSG is 23SL444. This is another lithic scatter composed of debitage of undetermined age and affiliation (Nixon, Kling, and Harl 1982:37). The site appears to be impacted and truncated by a nearby housing development as well as by Grant Road.

A light scatter of lithic debris, designated as 23SL445, is located on the first terrace of Gravois Creek about one mile northwest of ULSG. It is near 23SL59 but somewhat north. The site is believed to be essentially buried and relatively intact. No assignment of age or cultural affiliation was made (Nixon, Kling, and Harl 1982:37).

Site 23SL446 is a small lithic scatter of undetermined age and cultural affiliation (Nixon, Kling, and Harl 1982:36). It is located on the first terrace above Gravois Creek. The integrity of the site appears questionable, although a few pieces of lithic debitage were found in an area situated between two fill zones. The authors suggest the site has little likelihood of yielding further information.

Site 23SL447 is located on a terrace well above the creek and is another lithic scatter of undetermined cultural affiliation and function (Nixon, Kling, and Harl 1982:34).

Overview of Fieldwork at Ulysses S. Grant NHS

There have been twelve episodes of archeological investigation conducted by four principal investigators in support of site restoration and management-driven activities (Figure 5). Archeologist Vergil E. Noble, Midwest Archeological Center, directed the first archeological investigations in 1991 around the Main House, in the Summer Kitchen,³ and at two proposed parking lot areas. He conducted additional work on the two parking lot alternates in 1992 and 1993.

Dr. James E. Price, then associated with University of Missouri, supervised excavation of the basement and winter kitchen of the Main House in 1995. He continued archeological work in 1997 when he excavated a series of test pits and trenches at the site of a proposed maintenance facility, associated drives and lanes, and around the grounds of the park.

In 1998, Archeologist Karin M. Roberts, Midwest Archeological Center, documented several archeological features around the Chicken House, which was scheduled for restoration.

In 1999, Archeologist Douglas D. Scott, Midwest Archeological Center, directed mitigative excavations of the Summer Kitchen and the Ice House in support of their restoration. Scott returned to the park in 2000 to supervise geophysical exploration and testing of the site of the proposed Barn relocation project, which was part of the park plan to upgrade the visitor center and exhibit area. During this work the team attempted to locate archeological signatures of a fence that once enclosed the Main House yard. That effort continued in 2001 when Scott returned to search for a latrine and fence line behind the Summer Kitchen visible in a late-nineteenth-century photograph. No privy was found, but fence posts and a twentieth-century foundation for a later structure were documented. Scott again returned to the park in 2002 to document a stone foundation encountered during restoration work on the Summer Kitchen foundation. He returned to the park in 2003 to monitor activities associated with the construction of a new visitor center complex and relocation of the Barn out of the floodplain.

In 2004, Steve De Vore conducted geophysical investigations at sites associated with the Dent–Grant occupancy, but now outside the park proper (De Vore 2004).

1991: The First Archeological Work at White Haven

For three weeks during the summer of 1991, Noble and an archeological team from MWAC conducted the first archeological investigations at Ulysses S. Grant National Historic Site (Noble 1991a, 1991b). Those excavations served two major purposes: (1) to provide information on the structural evolution of White Haven for preparation of a Historic Structure Report on the property; and (2) to examine two large open grassy parcels identified as possible visitor parking areas. The artifact collections and project records are cataloged in the National Park Service collections management system as ULSG Accession 8 and MWAC Accession 391.

Summer Kitchen

Noble's investigation in support of determining the site's structural evolution began with test excavations in and around the Summer Kitchen.³ His team excavated five 1-m by 2-m test units, as well as extensions off two of them measuring less than 1 m by 1 m inside the building that had been modified from

³ The summer kitchen function of this structure had not yet been determined, and it is referred to as the stone building in Noble's 1997 report on his 1991 fieldwork.

its original function to become a garage (Figure 5). There was little variation in the soil matrix from unit to unit. Due to the earlier damage to the building and later modification, preservation was not the best, but there was sufficient evidence to identify the building's original west wall foundation, as well as the support for an interior-dividing wall (Noble 1997).

The material culture recovered from the Summer Kitchen floor primarily consisted of domestic refuse, such as ceramic sherds, bottle glass, and various personal items. Many of the datable items probably represent the mid-nineteenth century. Their depositional contexts were not firm, since to some degree they appeared to derive from temporally mixed deposits.

Investigation of the Summer Kitchen continued with the excavation of two test units along the exterior perimeter of the structure. Both units measured 1 m by 1 m and lay flush against the foundation. The first was located below a window opening at the rear of the building. There was some thought that the window might in fact represent a partially filled doorway. The other test unit was a short distance north, where a modern workshop and studio addition met the Summer Kitchen. That location also seemed to be near the place where a doorway might have formerly passed through the rear wall.

The two test excavations against the east exterior wall of the Summer Kitchen provided evidence that the foundation of that structure is of substantial proportions. Confirmed to extend more than a meter in depth below the ground surface, the foundation also appeared to be laid up without benefit of mortar. Only in the window unit, however, could a construction trench be discerned extending out approximately 20 cm from the foundation.

Artifacts recovered from both units largely appeared to be redeposited. Especially in the upper levels of excavation, the unit yielded artifacts of mixed temporal affiliation. Pre-Civil War items lay in close association with materials of much more recent vintage. Noble (1997) concluded that the high number of artifacts from the first half of the nineteenth century, even if not in primary context, suggest a rather early date for the structure's construction.

Breezeway Between the Main House and the Summer Kitchen

The excavation team also examined the area lying immediately west of the breezeway connecting the Main House to the Summer Kitchen (Figure 5). Two test units placed in this area revealed heavily disturbed deposits that yielded little information on the history of the building sequences or occupation.

Excavations Around the Main House

There is ample photographic and other documentary evidence to show that an addition to the Main House formerly stood along that structure's east side. Although that room was not reconstructed as part of the period restoration, since it was of more recent construction, preparers of the Historic Structure Report desired more detailed information on the addition. In order to confirm its precise location it was necessary to excavate certain areas of the east lawn. The research team laid out test units with reference to measured drawings produced by the Historic American Buildings Survey (HABS) in 1940. Five 1-m-x-1-m test units were excavated within the supposed locations of the addition's foundation walls (Figure 5).

Excavations in search of the White Haven east wing addition were unproductive. Although situated in the most likely spots to intersect sections of the addition, according to its depiction on the 1940 HABS plan drawing, no irrefutable evidence of a foundation could be discerned. Since there is no doubt of the east wing's former existence or position, it must then be concluded that either demolition obliterated the evidence or such expected evidence never existed.

The Main House is flanked by two massive chimney stacks built of limestone. The project historical architect was interested in resolving certain questions about their construction, as well as the relationship of those features to other elements of the domicile. Excavation of the east chimney test unit (Figure 6) and its extension revealed no indication of a lightning ground rod, or any other cultural feature, having been present here, although nineteenth-century down conductor standoffs remain embedded in the chimney stack. A very narrow line of dark organic soil suggested that construction of the chimney proceeded by

laying up the stones within a space only slightly larger than the base itself. In addition, a small copper gas line ran through the chimney stone and an armored cable ran through the test unit toward some other connection with the house.

The west chimney was also tested to determine construction details. The 1-m by 2-m unit stretched across nearly the entire width of the chimney base and butted against the cellar entry bulkhead at the south end. That orientation allowed the simultaneous examination of the chimney and the cellar entry. Controlled excavation against the west chimney provided scant new information. Primarily the exercise enabled the project historical architect an opportunity to examine the stone masonry at some depth below grade. The test unit also revealed a soil anomaly that possibly represents a post mold left by the support for a trellis that stood against the chimney stack.

In order to determine whether the front porch configuration might have been different in the past, excavators opened a small test unit underneath the decking. The unit measured 2 m by 50 cm and fell immediately west (left) of the porch steps between two piers. Limited excavations beneath the White Haven front porch suggested that limestone piers apparently preceded the current joist supports. However, during restoration and with the finding of a ca.-1883 Leis Family photograph showing the porch it was determined that the limestone was part of a dry-laid foundation wall beneath the porch perimeter.

Noble also placed a 1-m by 2-m test unit along the west wall of the winter or basement kitchen in the Main House after the 18-inch-thick concrete and wood frame Wenzlick floor system was removed by project historic architect Al O'Bright. Noble found very few artifacts in the unit, leading him to conclude that twentieth-century construction had obliterated most of the Dent–Grant occupancy era deposits or features (Noble 1992). Price and Hastings (1998) intended to excavate only two 1-m by 1-m test units to complete mitigation requirements in 1995. However, the two initial units lead to the excavation of the entire basement kitchen room and the recovery of significant construction and cultural information. The only area that did not yield substantial evidence of the Dent–Grant occupation was the area along the west wall where Noble had placed his single test unit. The vagaries of sampling can sometimes be misleading.

Parking Lot Investigations

Noble inventoried and shovel-tested two potential visitor parking lot sites in 1991 (Figure 5). The Cottage, serving as park headquarters, and the relocated Barn were between Parking Alternates 1 and 2. Parking Alternate 1 was in the western sector of the White Haven Grounds, located north of the primary access lane that enters the site from Grant Road across the abandoned Missouri and Pacific Railroad tracks. With a presumption of significant cultural resources being present, the survey team employed a relatively close transect interval of 10 m. The team recovered only a few artifact fragments, however, from the entire area. Even the positive shovel tests normally yielded only one or two items each (Noble 1997).

Parking Alternate 2 was located in the western sector of White Haven's grounds, though generally south of the primary access lane. There was some documentation that the Barn and several associated dependencies (e.g., a corn crib) once stood on part of Parking Alternate 2. Shovel tests in Parking Alternate 2 generally revealed few materials of any consequence. Larger concentrations of material seemed to lie at the eastern end of the study area, but even those were slight in comparison to what should be expected for the former Barn complex. Moreover, most of the materials recovered do not suggest correlations with a service building. Investigation of the two parking alternates tentatively identified in 1991 revealed little of consequence.

1992 and 1993: Geophysical Investigations and Ground Truthing

Noble recommended employing remote-sensing techniques as a follow-up to the inconclusive shovel testing of the 1991 parking lot work. In 1992, he conducted geophysical investigations in several areas of the site using a proton magnetometer and an electrical resistivity meter (Figure 5; Noble 1992). Weymouth (1993) analyzed the data collected during the study of two parking lot alternates. Three 20-m-sq blocks (M9/R9, R10, and R11) were surveyed between the current Barn site and the Cottage. The magnetometer failed to function properly in two grids (R10 and R11), so only resistance data was collected.

The only significant anomaly noticed in any of the grids analyzed by Weymouth (1993) was in R10, the northeastern most grid, approximately 5 m south of the 2000 Grid 1. The anomaly turned out to be a piece of iron pipe (Noble 1993). Additional anomalies were identified in the Prairie Spring floodplain and were ground-truthed by Noble (1993). In one test unit, his team encountered a variety of large iron objects such as steel cable gears, a riveted iron pipe, and other ferrous items. The material was identified as a post-Dent–Grant occupation trash deposit and left in place. Closer to the Prairie Spring itself Noble’s team found an extensive trash deposit and recorded a soil profile that indicated an infilling of an old creek channel or oxbow. Historical information indicates that the Wenzlicks filled the channel and re-routed the spring flow in the 1950s.

A 20-m-sq area east of the Main House established at the presumed location of the east wing was also investigated using magnetics and electrical resistivity. The grid was designated M12 for magnetics and R13 for resistivity. Weymouth (1993) reanalyzed the data and suggested that there was some indication of a linear anomaly running north and west through the grid that could be consistent with a wall alignment. Unfortunately, the location has not been ground-truthed since then. The 1992 fieldwork documentation is cataloged under ULSG Accession 13 and MWAC Accession 475, and the 1993 ground-truthing project documentation is cataloged under ULSG Accession 14 and MWAC Accession 511.

The 1995 Field Season

The first large-scale archeological investigations began in 1995 through a cooperative agreement between the Midwest Archeological Center and the University of Missouri, Columbia, and included three sessions of fieldwork. The first took place April 10–28, 1995, the second was conducted September 5–15, 1995, and the third took place October 10–13, 1995. As with earlier projects, the goals for this project were directed by the park and were to continue to gather information that would be useful in restoration planning. In addition, the 1995 investigations were intended to mitigate adverse impacts resulting from planned structure stabilization and water abatement (Price and Hastings 1998).

As shown in Figure 5 and reported by Price and Hastings (1998), five areas in the park were investigated during the April 1995 work: (1) the midden area on the east exterior wall of the Summer Kitchen, previously tested by Noble in 1992 and shown to contain deep stratified deposits rich in cultural material; (2) the area under the previously demolished “Hunt Addition” adjacent to the north side of the Main House; (3) the areas under the front porch of the Main House that had not previously been excavated by Noble’s crew; (4) the area adjacent to the exterior south wall of the winter kitchen cellar; and (5) the soil fill under the concrete floor of the west cellar of the Main House, which is also known as the winter kitchen.

Field investigations in September 1995 consisted of excavations to sample the area on the downhill slope to the west of the Main House where a large subsurface conduit was to be installed as part of the water abatement plan to remove groundwater from around the Main House. In addition, excavations continued in the cellar winter kitchen.

Archeological work conducted in October 1995 completed the excavations of the soil fill floor in the cellar winter kitchen. Areas around the large stone east chimney foundation in the cellar were previously covered by either concrete or a large threshold stone that prevented investigation during earlier visits to the site.

In addition to controlled excavations in 1995, crew members and park staff collected artifacts from backdirt piles made during foundation stabilization of the Main House and the water abatement project.

The midden area outside the Summer Kitchen, tested by Noble in 1991, provided an excellent sample of nineteenth-century household and building debris, and the stratigraphy showed the sequence of building and disposal in the area. Cultural deposits extended to a depth of an average of 45 cm below the surface. Due to the presence of plaster fragments, mortared limestone fragments, and lime mortar, Price determined that a structure was razed in the vicinity and the debris scattered in this area. In addition, this

area of the site contained a midden of household refuse resulting from many years of dumping and redistribution (Price and Hastings 1998:6).

Excavations in the Hunt Addition area between the Summer Kitchen and the north side of the Main House (Figures 5 and 7) revealed the foundation trench and foundation stones of the addition, originally built between 1818 and 1820, and a limestone walkway leading from the Summer Kitchen to the rear of the Main House (Price and Hastings 1998:6). During excavation in this area, it was determined that only a few stones from the bottom of the foundation for the Hunt Addition were still in place and that they had been laid without any mortar. Price hypothesizes that most of the Hunt Addition foundation stones were removed when the structure was razed. A builder's trench with parallel walls approximately 48 cm across was uncovered at the base of the foundation. The limestone walkway, although disturbed, was determined to have originally measured approximately 1 m wide and was constructed of thin slabs. Associated with this walkway was a curbing of limestone slabs set in the original ground surface on their vertical edges and protruding to a height of approximately 10 cm above the top surface of the walkway. Price interprets this arrangement as a small checkdam to retard water flow and erosion between the Hunt Addition and the Summer Kitchen.

Excavations under the front porch revealed the bottom course of limestone slabs from a porch footing and were associated with limestone rubble. This limestone course was found in a builder's trench. In addition, the underside of the porch included many limestone slabs that had been displaced from a previous stone porch foundation.

The downhill slope to the west of the Main House produced evidence of a water-worn gravel roadway leading to the rear of the Main House. After being revealed in the archeological record, this roadway was discovered by park staff in a period engraving on file at the park of the Main House and outbuildings published October 16, 1875, in *Frank Leslie's Illustrated Newspaper* (Roberts and Price n.d.:23). Evidence of building renovation on the property was also uncovered in this area as many excavation units revealed wall plaster and other building materials that had been deposited in this area.

The excavations at White Haven receiving the most attention during the 1995 field season were those in the winter kitchen area of the Main House cellar. Although the cellar kitchen was subjected to limited testing near the fireplace hearth by Noble in 1992, little cultural material was found. The entire winter kitchen was systematically excavated over the course of the 1995 field season as noted earlier. It was in the winter kitchen that groups of artifacts were excavated that may have bearing on the religious lives of the slaves living at White Haven in the nineteenth century (Price and Hastings 1998:19–20). According to Price (1995:6), the materials excavated from the winter kitchen are “the best database on the configuration and material assemblage of a slave kitchen ever compiled in Missouri.”

The winter kitchen portion of the limestone cellar was added to the Main House about 1838 when the vertical log structure was added to the Main House above. Large, flat limestone slabs were laid at the base of the northwest and southeast walls and extended into the room (Figure 8). These served to stabilize foundation wall footings along the length of the northwest and southeast walls. The northeast and southwest walls of the cellar were constructed using trenches. The southwest wall of the cellar contains the fireplace and chimney used for cooking in the room.

Around the time the cellar was constructed, the southeastern three-quarters of the cellar were excavated below the level of the northwestern quarter of the cellar (Figure 8). Six logs were placed in this excavated area, running from the southeast to the northwest side of the cellar but stopping short of the northwest cellar wall. A seventh log ran along the edge of the hearth in front of the fireplace on the southwest wall of the cellar. The southeast end of this log was on the floor of the excavated area and the northwest end was placed into an excavated trench. Presumably, floorboards were laid across these mud joists to create a level wooden floor, primarily on the southeastern side of the cellar.

Price and Hastings (1998) propose that the portion of the cellar with the wooden floor—the southeastern three-quarters of the room—is where most of the food-preparation and other household activities took place in the winter kitchen. Stones and bricks found in the southeastern portion of the cellar suggest

that the mud joists and wooden floorboards began to shrink and decay over time and needed extra support to keep the floor stable.

As the boards shrank and cracked, small artifacts probably fell through the gaps in the floorboards leaving the pattern of artifacts seen during excavation in 1995. A variety of larger artifacts, including those interpreted to be part of a religious cache of objects, was also found in the cultural midden reflecting the area that would have been under the floorboards.

The floorboards and mud joists were removed from the winter kitchen sometime in the mid-nineteenth century, probably within 20 years after the end of the Civil War. Shortly after the removal of the wooden floor, the depression left on the southeastern side of the cellar was filled with creek gravel. This event preserved the trenches left by the removal of the mud joists and kept the stratigraphy of artifact deposition during the life of the wooden floor intact beneath the gravel (Price and Hastings 1998:11).

Around 1914, a section of the southeast wall was removed in order to install a coal-burning furnace in the cellar. This wall section was reconstructed after the furnace installation. An existing entrance to the cellar on the south end of the southwest wall of the room was used to unload coal into the cellar for the furnace. This small entrance was originally a door about 4 ft high and was constructed of vertical boards with strap hinges. An 1860 photograph of the Main House shows the opening covered with horizontal slats that may have served as barriers to vermin entering the food preparation area while allowing some ventilation. The stair at the small winter kitchen door may have been added around 1870 when the first floor kitchen construction closed off the original entrance to the basement kitchen. This small door served as a cellar access until about 1940 when an internal basement stair was added and the small door modified by the Wenzlicks (O'Bright 1999:2.234–2.235).

In the late 1940s or early 1950s, ceramic drainpipe was installed in a T-shaped trench across the cellar floor. This installation disturbed or removed both the gravel layer and the underlying cultural level. A concrete floor was poured over the entire cellar floor with the drain near the center of the room sometime in the 1910s (Price and Hastings 1998:13).

Price and Hastings suggest that two specific concentrations of artifacts excavated from the winter kitchen are groups of objects placed specifically under the floorboards by slaves working or living in the cellar. They contend that the floorboards at the edge of the room were lifted and these objects were placed beneath them and between the log floor joists for one to three reasons. First, the cache might serve as a means of protection. Secondly, a cache might be placed to seek a cure for an ailment or illness. And lastly, caches were thought to bring good fortune for the future (Price and Hastings 1998:19).

The first of these groups of artifacts is a concentration of broken ceramic vessels found near the east end of the cellar, at the base of the chimney on the northeast wall. Primarily large fragments of plates and saucers, both porcelain and whiteware vessels are present in a variety of decorated styles including transfer print and overpainted porcelain. This concentration occurs beneath the gravel fill and above the trenches left by the removal of the mud joists for the wooden floor. The concentration occurs over an area of approximately 90 by 70 cm. In addition to the broken ceramic vessels, an examination of the winter kitchen artifacts reveals that there were other artifacts in the same excavation level that may have relevance to the cache interpretation. This includes two iron wire fragments, an iron purse frame fragment, an iron button fragment, an iron buckle, a clear glass compote stem, 44 cut nails or nail fragments, and one brass spoon bowl fragment.

Gladys-Marie Fry, through personal communication with Price (Price and Hastings 1998:19–20), interprets the broken ceramics in this concentration as the ritualistic breakage of vessels meant to keep the spirit of a deceased person from returning. According to Fry, pieces of broken ceramic vessels have been found at African-American gravesites with this explanation.

The second grouping of artifacts considered to be an intentional cache of objects occurs within an area measuring approximately 1 m along the southeast wall of the cellar and extending about 1.4 m into the room. This area lies in the corner of the room near the fireplace hearth and the exterior door next to

the fireplace on the southwest wall. Contained in the cultural layer below the gravel fill is a variety of artifacts that may, when taken together, constitute an assemblage with spiritual meaning. Price and Hastings' (1998:18–19) list of cache objects from this area includes a large mammal knuckle bone, an English bone-handled two-tined fork, a broken steel blade from an English table knife, the basal portion of a prehistoric chert projectile point, a prehistoric chert core with edge use, a prehistoric chert scraper, two large clear glass chest knobs, a clear glass compote stem ball, a thimble, a brass spoon bowl, an iron spoon bowl, five buttons, a playing marble, a coil of brass wire, a smooth river pebble, two oval brass doorknobs on an iron stem, a green transfer-printed sugar bowl lid, and a scythe whetstone. Three of these objects—the brass doorknobs, transfer-printed sugar bowl lid, and one of the glass chest knobs—were found within 20 cm of one another, nearly adjacent to the southeast wall. The remainder of the objects appears to have been scattered throughout the 1.4-by-1-m area. Additional artifacts were found in the same strata in this area of the cellar and might be related to the cache include three additional buttons, 18 cut nail fragments, a second dolomite playing marble, and an iron key.

Some of these items, while listed as part of the cache and found in the same general area as the rest of the cache items, were actually excavated from an ash-filled feature directly under the gravel layer. This feature appears to have extended from the front of the fireplace hearth nearly to the southeast wall of the cellar. It is somewhat unclear which artifacts from the Price and Hastings (1998) list were directly in the feature and which were excavated from outside the feature. The artifacts definitely labeled as excavated from the ash-filled feature include the English bone-handled two-tined fork, one of the large clear glass chest knobs, the clear glass compote stem, and the thimble. Additional items excavated from the ash-filled feature that may have religious significance include six buttons, a pebble, and a prehistoric chert flake.

What is the evidence that the winter kitchen artifacts at White Haven were intentionally placed as a cache with ritual significance? Using Leone and Fry (2001) as a guide, the objects from both concentrations of artifacts compare favorably with the types of artifacts uncovered from caches in eastern North America. This is especially true of the broken ceramic vessels in the first concentration, which were discovered very close to one another, even overlapping in some instances. The second concentration also contains objects common in previously recorded caches. However, except for the sugar bowl lid, brass doorknobs, and clear glass chest knob, it is unclear whether the remainder of the objects in this area were in close association with one another and may have been spread out over a meter or more. Both concentrations contain circular objects, an essential element of a cache, representing the continuity of life.

What evidence is there that the White Haven artifacts are not an intentional, ritually significant cache? Price and Hastings (1998) suggest that another explanation for the broken ceramics in the first concentration is that they might have been broken by accident and placed under the floor in order to hide the evidence. In regards to the second cache of objects, it is still not clear how the various objects recorded as a cache were associated. While many of the objects were excavated from the soil adjacent to the southeast wall of the winter kitchen, others were from an ash-filled feature intruding into the cultural level of the excavation units.

Another possible problem with the interpretation of these objects as a ritual cache is the water problem in the cellar. The floor has been seen to flood numerous times during the 1990s until perimeter drainage work improved water control. In addition, the previous owners probably installed the ceramic drain-pipe and concrete floor to attempt to control flooding in the room (O'Bright 1999:2.234–2.235). The earlier installation of gravel into the room may also have been an effort to control water in the cellar. In any case, water has probably been a problem in the room for many years. This, in combination with the fact that the room slopes to the southeast, could have led to periodic standing water near the southeast wall of the room. This flooding would have hastened the deterioration of the wood floor joists and floorboards. If there was space between the bottom of the floorboards and the soil surface between the floor joists, lighter artifacts could have floated towards the southeast side of the room as water slowly evaporated and dried out the soil below the floorboards.

Because of the fact that objects known to have ritual significance are concentrated in certain areas of the cellar, even heavy objects that could not have been moved by water, it appears that they were probably placed there intentionally by the slaves working and living in the winter kitchen. Although the reason behind this placement is unclear at this time, it does seem clear that certain large objects were placed under the floorboards near the edges of the room. In order for this to occur, the individual would have had to lift the floorboard off the floor joist and place the items on the soil below.

The case for these two concentrations of artifacts being more surely identified as ritual caches could be strengthened with additional research on the history of the slaves who lived at White Haven. By 1850 there were 30 slaves living and working with the Dent family (Little 1993:43). How did they come to be at White Haven and where did they live before they came to live with the Dent family? What can we determine about their ancestry and what kinds of religious beliefs did they carry with them to Missouri? Finally, is it possible to determine who specifically worked or lived in the winter kitchen?

The artifacts and project documentation are cataloged under three sets of accession numbers. The Hunt Addition and the initial exploration of the cellar materials are cataloged under ULSG Accession 10 and MWAC Accession 733. The winter kitchen portion of the cellar and some backhoe trenching west of the Main House are cataloged under ULSG Accession 11 and MWAC Accession 734. The final cellar and furnace room excavations are cataloged under ULSG Accession 12 and MWAC Accession 735.

The 1997 Field Season

Subsurface archeological investigations were carried out at Ulysses S. Grant National Historic Site from June 30 through July 25, 1997, under a cooperative agreement between the National Park Service and the University of Missouri, Columbia. Dr. Price served as principal investigator, and he and Dr. Mark Lynott, Midwest Archeological Center, established the research strategy for the project. Karin Roberts and Renata Coleman of the Midwest Archeological Center served as crew chiefs. The project records and documentation are cataloged under ULSG Accession 9 and MWAC Accession 720.

Area 97-I, Behind the Summer Kitchen

A total of 15.9 m² was excavated in the area north of the Summer Kitchen and northeast of the Main House (Figure 5). Portions of this area, including some subsurface deposits, had been previously disturbed by the removal of shrubs and plants northeast of the Main House and by construction activities. The 15.9 m² excavated consisted of seven 1-m by 2-m excavation units and one 1-m by 1.9-m excavation unit excavated to sterile soil.

Excavation Unit 97-1 was excavated in a light midden area southeast of the remains of a brick cooling fountain. This unit was slightly disturbed by the 1992 installation of buried water supply lines and some old electrical cables that provided power to electric pumps associated with the cooling fountain. Excavation Unit 97-2 was also placed in the light midden area and consisted of undisturbed deposits. Excavation Unit 97-3 contained relatively little cultural material but encountered a gray soil that produced a peculiar odor when first exposed. The smell was rather acrid and likely resulted from soapy laundry water soaking into the ground in that area over a long period of time. Excavation Unit 97-4 was excavated 2 m south of 97-3 and encountered the same foul-smelling soil to a depth of approximately 40 cm below surface. It contained very few artifacts. Excavation Unit 97-6 tied together Excavation Units 97-2 and 97-3. The southern corner of the unit also encountered the foul-smelling soil and established its limit on that side.

Excavation Unit 97-5 was excavated 1 m southeast of the southeastern wall of the studio addition of the Summer Kitchen. It encountered a rather dense refuse disposal area that generated abundant artifacts from the first half of the nineteenth century. It was slightly disturbed by four copper pipes that were conduits for water to and from the brick cooling fountain.

Excavation Unit 97-7 was excavated 1 m from the northeastern wall of the Summer Kitchen. It abutted the unit previously excavated by Noble under the window in that structure. It contained an abundance of artifacts dating to the first half of the nineteenth century embedded in a very dark organic soil of the

midden first tested in 1991 (Noble 1997) and further tested in 1995 (Price and Hastings 1998). In the northwest corner of this unit, a feature consisting of jumbled limestone fragments was encountered and recorded. The southeastern one-fourth of this unit was badly disturbed by a brown clay drain tile installed about 1930. Excavation Unit 97-8 was excavated to the east of 97-7, and the disturbance from the same tile was found to continue across the southeastern portion of the unit. Both Excavation Units 97-7 and 97-8 were found to contain dark midden containing an abundance of artifacts.

Excavation of Area 97-I resulted in the discovery of the laundry water disposal area and demonstrated that the dark midden is restricted within an area from the northeastern wall of the Summer Kitchen northeastward approximately 4 m. The Summer Kitchen was built on a gentle slope and refuse was thrown behind it that accumulated to such an extent that it elevated the ground surface almost 60 cm, creating the relatively flat surface evident there today.

Area 97-II, The Ridge Slope Northeast of the Chicken House

Installation of water supply lines was planned for the area on the slope paralleling the driveway northeast of the Chicken House. In order to sample the area and search for subsurface features and concentrations of artifacts a series of shovel tests was excavated (Figure 5). They were placed at 2-m intervals on a northwest-southeast axis and at 5-m intervals on a northeast-southwest axis. Each shovel test was approximately 30 cm by 30 cm and 20 cm in depth.

It was quite evident that the entire area except the southwestern end was rather devoid of cultural materials. In the southwestern six shovel tests there was an abundance of artifacts that indicated the presence of a rather shallow sheet midden. In order to assess the nature and content of this midden three 1-m by 2-m excavation units were excavated to sterile subsoil. These units produced ceramics, container and window glass, square-cut nails, and fragments of animal bones as well as some miscellaneous artifacts such as a fragment of a cut crystal lamp prism. The deposits in the area of the three excavation units did not exceed 25 cm in depth.

Evidence from the slope northeast of the Chicken House suggests that general household refuse was deposited there in the 1830s, 1840s, and 1850s.

Area 97-III, Maintenance Building Area Near North Gate

Construction of a new maintenance building to serve Ulysses S. Grant National Historic Site was planned for placement on a level area east of the driveway near the back gate into Grantwood Village. In order to systematically sample the area it was subjected to slit trenching. This consisted of excavating narrow trenches (25 cm wide) on a grid at 4-m intervals over a 20-m-sq block (Figure 5). Placement of the 20-m square corresponded to the area where the new building would be constructed. Slit trenches were excavated every 4 m on both axes creating a complete grid except where trees and shrubs prevented excavation. All 58 units were taken down to sterile soil, an average of 10 cm below the surface, and were the width of a standard shovel. All soil removed from each 4-m segment of slit trench was screened and artifacts recovered were containerized by each 4-m provenience unit.

Excavation of this area produced very few artifacts. The few artifacts discovered in Area 97-III were not concentrated in any one region of the 20-m block. While some of the discovered artifacts date to the Grant period, others are of recent age. No subsurface features were detected as a result of the slit trenching. A twentieth-century underground irrigation system was identified during construction. It is evident from the excavations in this area that no subsurface features or significant concentrations of Dent-Grant-era cultural materials remain in the area of the maintenance building.

Area 97-IV, The Western Slope and Roadway

In 1995, Price and his research team discovered a gravel roadbed on the slope southwest of the Main House. In 1997, a major effort was expended in excavating a portion of the roadbed and further defining its route up the hill to the Summer Kitchen and back of the Main House in an area designated Area IV. A 20-m by 20-m area was delineated on the ground using a transit and assigned coordinates (Figure 5). Slit

trenches were excavated every 4 m on a northwest-southeast axis in order to locate the roadbed and any other features in that area. These trenches, on their northwest end, transected the roadbed evidenced by abundant creek gravel, linear depressions, and limestone rubble.

Once the roadbed was delineated with slit trenches, an area 5 m long was selected for excavation. The area selected was at the base of the slope and away from a recent water abatement trench that had badly disturbed portions of the road higher up the slope. The road occurs in a visible swale indicating that prior to creating the gravel road, occupants of the site had a roadway on the slope that likely caused erosion and created the swale. Excavation revealed that the roadway had ditches on either side of it, evidenced by narrow, shallow swales. On the west a strategy was developed to cut a series of trenches across the road, each exposing a single stratum in a stair-step fashion.

Five strata were defined above, in, and under the roadbed. The uppermost is Stratum 1, which consists of the ground surface and the underlying clay deposited in the swale by park maintenance personnel in 1996. Underlying this is Stratum 2, which consists of soil that accumulated after the roadway was abandoned. Apparently it was deposited by water carrying soil from higher up the slope. Gravel is encountered next. The Stratum 3 gravel varies from 10 to 25 cm in thickness and represents the principal roadbed. Gravel from the road was scattered into the ditches on either side of it. As part of this road episode stratum, the road ditch on the southeastern side of the roadbed contained charcoal, ashes, and soil from slopewash. Also part of this stratum is the linear deposit of limestone rubble that apparently was placed beside the northwestern side of the road to control erosion. To the northwest of the limestone rubble, Stratum 3 contained over 10 cm of slopewash soil. Stratum 4 is made up of the soil immediately under the gravel stratum. It apparently represents an earlier roadbed in which little or no gravel had been incorporated, and it thickens toward the northwestern side of the excavation where slopewash soil had been deposited during this episode. The last is Stratum 5, the residual sterile subsoil into which the road swale eroded.

Excavation of the cross-section trenches revealed that when the last road was first constructed, a relatively deep ditch had been excavated along its southeastern margin. This ditch contains bits of wood charcoal and ashes indicating that yard debris had been burned in it prior to it having been filled by eroded soil and gravel. Gravel also became scattered outside the ditch on the southeastern side of the road for a distance of at least 50 cm.

Up the slope from the point where the roadbed was cross-sectioned, slit trenches were widened with 1-m by 2-m excavation units to expose portions of the roadbed. In that area it was found that apparently the road forks, with the smaller branch heading off in the direction of the Ice House and Chicken House. In order to fully tie together the current excavations with those of 1995, Excavation Unit 95-52 was exposed and mapped as part of the road excavations. In that area it was discovered that the road had been constructed on top of a household refuse midden, or that a midden had been deposited along the northwestern side of the road, possibly filling in a ditch. Also, a more recent circular pit that penetrated to sterile soil was also exposed in the area (Feature 97-2). Subsequent to road construction a rather large quantity of wall plaster had been deposited along the northwestern side of the road, apparently filling in a shallow depression that remained from a road ditch.

Excavations conducted to expose the road proved to be very significant in that the presence of the road was previously unknown until its discovery in 1995. Excavations in 1997 revealed that the road is a rather monumental subsurface feature on the site that dates to the target period of restoration, 1875. Subsequent to discovery of the road, research staff at the Ulysses S. Grant National Historic Site reexamined a period engraving of the Main House and outbuildings published October 16, 1875, in *Frank Leslie's Illustrated Newspaper*, and determined that the road as well as its fork to the Ice House and Chicken House are evident in that period illustration.

1998: Monitoring

The 1998 restoration of the Chicken House, located to the north of the Main House (Figure 5), invited the opportunity to monitor the installation of new concrete piers beneath the structure (Figure 9). The project began with mapping the surface features (former piers, wood fragments, bricks, etc.) under the Chicken House and collecting all artifacts on the surface. Artifacts consisted primarily of clay flowerpot fragments, bottle glass, and cut nails. Many large concrete fragments and stones were concentrated at the back of the structure. These might have been placed in order to control erosion under the building, as an obvious erosion channel ran from the east corner under the building through the back center of the structure. The project documentation and records are cataloged under ULSG Accession 16 and MWAC Accession 753a and 753b. During construction work the park staff recovered some isolated artifacts that are included in ULSG Accessions 17 and 18 and as MWAC Accessions 795 and 797.

Most of the Chicken House pier holes yielded no unusual artifacts. Those uncovered were of the same type as those excavated in July 1997 in test units 3 m to the east of the Chicken House. They were primarily small fragments and date to the nineteenth century. Various ceramic sherds were excavated including transfer-printed whiteware, Chinese Export Porcelain, and ironstone. In addition, numerous metal artifacts were uncovered including cut nails, an axe head, and an iron. Flat glass fragments and a variety of bottle glass fragments were found.

Two of the pier construction holes, one at the north corner of the building (Pier D) and one at the east corner (Pier A), contained fragments of wooden posts. These posts are evident in a 1940s photo on file at the park. These were most likely part of a fence associated with the Chicken House. The post at the east corner was still upright while the post at the north corner was in fragments.

The largest concentration of materials was uncovered at the rear of the structure in a pier construction hole at the center of the back of the building (Pier H). This contained a large number of complete bottles and bottle fragments. A ca.-1913 photograph shows garbage and debris extending down slope from the Chicken House in the location where the bottles were uncovered. A ca.-1940 photograph shows the same area, but the ground surface appears to have been modified by digging or leveling. The bottles uncovered in the Pier H hole date generally to the late nineteenth and early twentieth centuries and might correspond to the time when the Chicken House was moved to this location, probably sometime between 1875 and 1913. Bottles unearthed in this location include soda bottles embossed with the names of St. Louis manufacturers H. Wetter and L. Schnellmann, a Hostetter's Bitters bottle, and a cobalt blue Bromo Seltzer bottle (Roberts 1998).

1999: Summer Kitchen and Ice House Excavations

A team from the Midwest Archeological Center under Scott's direction carried out excavations in the Summer Kitchen and the Ice House between March 15 and 29, 1999, as part of the mitigation of impacts due to the buildings' restoration (Scott 2001a:13–30).

The Summer Kitchen

From historic graphic documentation and existing physical (O'Bright 1999:3.21–25) and archeological evidence (Noble 1997), a description of the original Summer Kitchen was developed and plans made for restoration of the building to its 1875-era appearance. The structure measured 18 by 33½ ft in plan and was constructed of 18-inch-thick limestone rubble walls laid in sand and lime mortar. The structure was topped with a moderately sloped gable roof, and the roofing material is believed to have been hand-rived wood shingles. There were low-profile chimney stacks at each gable end. It is believed that the gable end stone walls terminated at the eave line level, and that the resultant voids flanking each side of the chimney stacks were clad in siding fastened to wood framing. The roof and ceiling structure is unknown but was probably hand-hewn timber.

The two rooms of the one-story building were separated by an 18-inch-thick limestone wall that offered no passage between the two rooms; the south room measured 15 ft square and the north room 14 ft

by 15 ft. One window was placed in the east wall of each room and one door in the west wall of each room directly across from the windows.

It is unknown how long the structure served as the Summer Kitchen, but by the time the property was purchased by Albert Wenzlick in 1913 a permanent, first-floor kitchen had been established in the Main House. The Summer Kitchen remained intact until at least 1875 and possibly into the 1890s, but it had partially collapsed prior to 1895. It is possible that the Summer Kitchen deteriorated when the property was virtually abandoned and no longer maintained between 1905 and Albert Wenzlick's purchase in 1913 (O'Bright 1999:3.23).

According to O'Bright (1999:3.23), the Summer Kitchen functioned as a seldom-used storage shed during Albert Wenzlick's ownership until his death in 1937. By 1947 the wood frame walls and roof were stripped off, possibly in preparation for construction work for conversion of the Summer Kitchen for use as a garage. Stone was reclaimed from the collapsed west wall and demolished internal partition and used to repair the ruined walls, construct new chimney stacks, and extend the west wall six feet beyond the original location for accommodation of automobiles. The deteriorated north window opening on the east side was partially infilled and a new doorway was created for passage between the Summer Kitchen and the workshop. Brick paving for the floor surface was placed on a thin concrete slab laid over clinker gravel, and the roof was constructed of new light wood framing. An underground water pipe and electrical line was laid from the house to the new workshop restroom, and a hydrant was placed at the interior of the garage connected to that line. Two overhead garage doors were installed.

The water line developed a leak in the area of the hydrant during the 1970s (Bill Wenzlick to Al O'Bright, 2 November, 1992). To repair the pipe Wenzlick excavated a large pit in the vicinity of the hydrant. This might have resulted in the disturbance and removal of archeological evidence of the west wall, as noted in 1991 by Noble (1997).

Excavations at the Summer Kitchen uncovered a few previously unknown architectural details and a large quantity of artifacts. The floor of the building was essentially destroyed by the twentieth-century conversion of the structure into a garage (Figure 10). The floor, which was probably a packed clay or earth floor, was totally destroyed. The fireplace hearths were likewise destroyed. However, fire-reddened earth and a few in-place stones outlined the original hearths and hearth aprons. The hearth aprons were about 18 inches (45 cm) wide, and probably two courses of stone high. If this reasoning is correct then perhaps as much as 2 to 3 inches (5 to 8 cm) of fill and earth-packed floor were removed at the time of the remodeling.

The other architectural detail observed was a remnant of building's original west wall foundation. This segment was found at the southwest corner. The remaining stones were dressed and laid. The remaining section is about 24 inches (60 cm) wide. Two other features were noted in the building. One is the remains of a line of glazing compound (Feature 2) that suggests a window fell or was stored in this location at sometime in the past. The other feature is a fire-reddened and baked pit in the floor of the south room (Feature 1). Its age and function could not be determined.

The large number of artifacts found in the Summer Kitchen tended to cluster in the western portion of the building and in the southwestern area in particular. There was less fill over the eastern and northern portion of the floor, and deeper deposits in the south and west areas. The western portion also had extensive evidence of rodent disturbance, which might account for the concentration of artifacts in those areas.

The artifacts dated predominantly from 1835 to 1880 and correspond to what is believed to be the period of use by the Dent and Grant families. Assuming the artifacts did, in fact, represent items lost or discarded during the historic use of the building, and not later discards, Scott (2001a) suggests some idea of room function and activities. The artifacts suggest the south room was used for food preparation. However, the artifacts also suggest that both the north and south rooms were the scene of a variety of other activities of daily life at White Haven. The artifact range and distribution suggest that both rooms saw activities associated with games played with marbles, smoking of clay and porcelain pipes, sewing, and other general domestic activities. While the south room may have functioned as a kitchen, the entire building served as the site of a wide range of domestic activities. It was not possible to determine with the

available evidence whether the Summer Kitchen also served as a slave quarters. However, the presence of the domestic and leisure-related artifacts certainly point to the use of the building's rooms as having a residential function in addition to a food preparation function.

The Ice House

Described as a springhouse or smokehouse for many years, architectural and historical analysis suggests the structure was originally constructed for cold storage (Marolf 1999). The structure is set into a northwest-facing hill overlooking the Prairie Spring at the north property line. The perimeter of the rubble limestone foundation walls measure about 23 by 18 ft with a stone partition that divides the interior into two equally sized rooms.

Excavations conducted by Scott (2001a:31–38) in the Ice House yielded very little to clearly define the function of the building earlier than the twentieth-century use. The floors appear to have been made of packed earth or clay. The only features identified were a clay drainage tile in the north room's north wall and a builder's trench in the south room. The presence of the drainage tile, and an older one found during the restoration work deposited in the fill outside the building, suggest the structure has had drainage problems for a long time. The artifacts found in the building nearly all postdated 1875, suggesting that a cleaning or remodeling, or perhaps a building episode, occurred about that time.

It is clear that the north room was used, in the early years of the twentieth century, as a catch-all storage facility. The south room contained evidence that it functioned as a smokehouse, albeit an informal one, during the twentieth century. This archeological data is consistent with the oral traditions of the last owners of White Haven.

The project artifacts, records, and documentation are cataloged under ULSG Accession 19 and MWAC Accession 813.

2000: Barn, Cottage, Cow Barn, and Shed Investigations

Geophysical and archeological investigations were undertaken in 2000 (Scott 2002a) to assess the potential for buried cultural deposits in the impact area designated for the relocation of the 1868 Barn and expanded administrative facilities that will impact the area of the Cottage and potential sites of the cow barn and shed (Figures 5, 11–12).

The Cottage is believed to sit on the location of a hipped-roof cow barn (Figure 13). Little is known about this structure. Only two references to it are known and one engraving showing it as part of the background. O'Bright (1999:7.9–7.10) believes the cow barn predates the construction of the Grant Barn. The earliest known reference to the cow barn is found in an 1818 letter from Ann Lucas Hunt to her father: "a new hewn log Barn 26 feet by 20' with sheds all around, 14 feet wide" (O'Bright 1999:7.10). The other possible reference is in an 1846 real estate sale advertisement. The advertisement mentions a large stable among the structures included on the property.

The only known depiction of the cow barn is an engraving of White Haven published on October 16, 1875, in *Frank Leslie's Illustrated Newspaper* (Figure 13). It shows a hipped-roofed structure with what may be vertical log walls. Two doors and a window are depicted on the west façade and a single door can be seen on the north façade. A cupola tops the barn roof. The pitch of the roof and lines in the engraving suggest that the north side had shed-like extensions along that face.

O'Bright (1999:7.10) reports that stone foundation remains were once visible about the present location of the Cottage garage and driveway. Former Cottage occupants, James and Charles Davis, in a March 18, 1993, interview with O'Bright, recalled the stone was visible at the ground surface before the garage was built. They recalled the foundations as being about 20 ft square.

The 1875 engraving also shows a small building—probably a shed—immediately north of the cow barn. Its function is unknown, but its configuration is similar to that of the Chicken House, which may

have been moved to its present location many years ago. The site of this shed is very near and most likely under the current Cottage site.

The geophysical and archeological investigation of the proposed Grant Barn relocation area revealed structural foundations probably associated with the ca.-1818 cow barn. Geophysical survey within six grids located several anomalies. These all proved to be of recent origin (water and electric lines), with one possible exception, a linear anomaly in Grids 1, 2, and 5. This linear anomaly could not be located or defined with archeological testing. It might be a runoff area that has a higher magnetic susceptibility than surrounding soils, or it might be a zone of compacted earth outlining an old path or roadway leading to the original Grant Barn site.

The substantial limestone foundation located in Grid 1 is likely associated with the 1818-era cow barn. The two wall segments are relatively intact and quite substantial, but at least one course of stone is gone from the foundation and its integrity is compromised by the fact the remaining wall segments are not complete in either height or length. Backhoe trenching in the interior area found no intact floors or early-nineteenth-century deposits. The earth in the interior appears to be imported fill used to level the area for construction of the nearby Cottage garage and driveway. Four limestone footings or piers were located south of the foundation and probably represent footings for sills associated with sheds that were once attached to the cow barn. Other than cut nails, no artifacts dating to the early nineteenth century were found in association with the limestone footings or piers.

The cow barn's west wall segment was severely impacted by a pit or trench cut through it during the early twentieth century. Some foundation elements may yet remain intact under the Cottage garage. With the exception of a few cut nails, the majority of artifacts recovered during the shovel testing and backhoe operations were late nineteenth to twentieth century in date. No materials were found dating to the Dent or Grant occupations exclusive of the architectural features themselves.

Fences

A wooden board fence once surrounded the Main House lot and is scheduled for reconstruction as part of the pedestrian traffic management plan. Little is known about the historic fence or fences except that one version or another of it appears in several depictions of the house and its grounds. In at least three late engravings (O'Bright 1999:Figures 2.1, 2.4, 2.9) the fence is shown as a picket style. However, a ca.-1860 photograph of White Haven (O'Bright 1999:Figure 2.3) shows a board rail type fence with supporting fence posts spaced approximately 7.5 ft apart. An engraving from the *St. Louis Republican*, July 24, 1885 (O'Bright 1999:Figure 2.10), also depicts a board rail fence, and Emerson (1896:389, 392) contains two photographs presumably taken about 1895 that show a decorative board and rail fence surrounding the grounds, with posts spaced about 7.5 ft apart.

During the 2000 fieldwork, an attempt was made to locate the board fence that once surrounded White Haven and its immediate grounds (Scott 2002a:9). The park's front-end loader was used to strip two areas about 2.4 m (8 ft) wide. The first area was located east and north of the main drive. This area should have corresponded to the southwest corner of the board fence. No traces of post molds or posts were evident, although a few 6- to 8-penny cut nails were recovered that are consistent with nail sizes that might have been used to fasten horizontal boards to the posts.

A second area east of the Main House and near the southeast fence corner was stripped. This area is higher ground and slopes away from the house to the asphalt road. The only cultural feature found was a series of limestone rocks in a rough alignment near the toe of the slope.

The 2000 effort to locate posts or post molds associated with the board fence that once surrounded White Haven was essentially a failure. The ground surface appears to have been modified over the years to such an extent that all indications of the fence line location, at least in the area investigated, were destroyed. One feature probably dating to 1940 was located. It is an expediently dug pit used to burn windows and other debris from the 1940 White Haven remodeling episode. The presence of Parisian Green paint on several of the window pane fragments helps support the house paint scheme.

The project records and documentation are cataloged under ULSG Accession 29 and MWAC Accession 916.

2001: The Great Privy Search

Scott (2001b) carried out additional geophysical investigations and backhoe and hand test excavations behind the Summer Kitchen in a further effort to locate archeological evidence of fence lines and the site of a small building believed to be a privy (Figure 5). The small building was noted in a previously unknown photograph of the Summer Kitchen discovered by the park staff in 2001.

Little is known about the location of privies or sinks at or near White Haven in the historic period. None associated with the Main House and its outbuildings are mentioned in any historic documents known to date. Former resident James Davis (O'Bright 1999:7.16) recalled the existence of a privy about 50 ft east of the Main House, and the 1940 HABS maps of the site record a small rectangular structure about that distance east of the northeast corner of the Summer Kitchen.

Bill Wenzlick, grandson of former owner Albert Wenzlick, recalled that Albert constructed a small summer cottage in this same area (O'Bright 1999:7.19–20) for use by his Great Aunt as a place of meditation. The building was about 12 ft square and had vertical beaded board siding. The structure was reportedly demolished sometime in the 1940s. Price may have also located this foundation about 30 ft south of the workshop addition and 30 ft east of the Summer Kitchen (O'Bright 1999:7.19).

Price noted a slight depression in that general area during some of his work at the site (O'Bright 1999:7.16). Using a steel rod he probed the area, noting sounding consistent with a masonry foundation around the depressed area.

Fourteen backhoe trenches were excavated in the area of the suspected privy and fence line in 2001 (Scott 2001b). Robert Nickel (2001) conducted a ground-penetrating radar study of the area as well. He identified one anomaly that was also tested. The anomaly proved to be the concrete foundation wall of the south side of the Wenzlick shop addition to the Summer Kitchen. The fill inside the foundation is of recent origin, being placed as fill when the building was removed in 2000 during the Summer Kitchen renovation. At a depth of about 30 cm, a layer of crushed cinders was encountered. This cinder level is associated with nearly all the Wenzlick-era construction and was seen in the Summer Kitchen excavations associated with its use as a garage after 1940 (Scott 2001a:14, 2001b). A small pile of broken old building stone and rubble, some with old lime plaster still adhering to some surfaces, was found about 1 m north of the concrete foundation wall. The stone appeared to have been placed as fill to help level the ground in that area during the shop building construction. No evidence of an earlier structure was seen in these backhoe trenches.

The absence of any subsurface pits or structural features that can be associated with a latrine or privy or the structure seen in the nineteenth-century photograph suggests several possible interpretations. One possibility is that the building face seen in the photograph is a shed rather than a privy. If so, then the later construction episodes on the site have destroyed any evidence of the building's actual location. Another possibility is that the structure was indeed a privy, but of the dry-sink type rather than one with a privy pit. So-called dry sinks were surface buildings with some type of removable wooden or metal, often tin or zinc, troughs placed under the catchment area. These troughs were periodically removed and the night soil cleaned out, often for use as fertilizer. This type of building would not leave a privy pit or major subsurface feature once it was removed, and just like a shed, the dry-sink site could easily have been obliterated by subsequent ground-disturbing actions in the area east of the Summer Kitchen.

Several recent concrete post molds designated Feature 4 were found during the backhoe trenching conducted in search of the privy. The feature consisted of three concrete post molds and a disturbed area of rock and concrete debris that form a rough rectangle. The concrete post molds of Feature 4 are the foundations for an approximate 8-ft-sq building of twentieth-century origin. It may very well be the structure depicted in the 1940 HABS photograph and may be the meditation cottage described by William Wenzlick.

The investigation also located three wooden fence posts that represent at least two fence building episodes. Feature 1 likely represents a twentieth-century fence, while Features 2 and 3 (wooden posts) probably represent one or two different nineteenth-century fence alignments.

Project records and documentation are cataloged under ULSG Accession 38 and MWAC Accession 963.

2002: Summer Kitchen Foundation Investigations

A previously unknown foundation was encountered during trenching associated with foundation stabilization work at the north end of the Summer Kitchen (Figure 5). Only one feature was found during the archeological investigation (Scott 2002b). Feature 1 is a limestone foundation discovered at a depth of approximately 40 cm below present ground surface. The foundation was roughly two courses of stone wide (40 cm). The feature's total length was 2.3 m and ranged between 0.4 and 0.5 m wide. The west end of the feature was somewhat irregular and disturbed by an earlier cutting and filling episode.

Feature 1 aligns with the internal fireplace and chimney on the north end of the Summer Kitchen. Feature 1 is 2.3 m (96 inches) long whereas the Summer Kitchen's north fireplace is 1.8 m (72 inches) long. Coincidentally, the Summer Kitchen's south fireplace is 95 inches long.

Few artifacts were found during the initial or extended trenching work. Artifacts were found in the upper 20 to 30 cm of fill and consisted of cut and wire nails, window pane and bottle glass fragments, blue transfer ware, ironstone fragments, annular ware fragments, and salt- and lead-glazed stoneware fragments. None of the artifacts was diagnostic for dating purposes, except that they ranged in general date from the mid-nineteenth century to the present.

The stone foundation (Feature 1) located during the trenching on the north side of the Summer Kitchen is somewhat enigmatic. It is located at the base of the foundation of the Summer Kitchen and protrudes to the north about 40 to 50 cm. It is only one to two and perhaps three courses of stone thick. No diagnostic artifacts were found in the fill above the feature, and the feature does not appear to have been larger or connected to any other foundation element. There is little or no evidence of mortar in the remaining stone joints and the feature appears to be dry-laid masonry. The feature is aligned with the north wall fireplace, but is longer. Its length corresponds to the size of the south fireplace in the Summer Kitchen. It is possible that Feature 1 simply represents a fireplace foundation for the kitchen that was laid out at the time of the building's construction but was considered to be too large and thus not built.

Project records and documentation are cataloged under ULSG Accession 41 and MWAC Accession 986.

2003: Visitor Center Construction Monitoring

The culmination of park planning efforts began in the spring of 2003 with the construction of a new visitor center complex. The plans called for constructing a new building with a basement on the site of the Barn Well and moving the Grant Barn out of the floodplain and up to the site of the Cottage. The Barn and visitor center are to be connected by an underground passage as well as aboveground walkways. Since the construction required the destruction of the Barn Well and the Cottage, monitoring was required to further document any associated features. Two buried features were found associated with the Barn Well, and three other features were identified during the Cottage demolition.

The Barn Well proved to be a brick-lined affair about 20 ft (6 m) deep and is fully documented by Scott (2003). One nearby feature consisted of in-line clay drainage tile that functioned as an expedient conduit for electrical wire associated with a generator housed in the Grant Barn prior to city electrical services being available to the White Haven area. The drainage tile and wiring date to the Wenzlick occupation, i.e., sometime prior to 1962. The other feature was a layer of pea gravel spread around the south, east, and north sides of the Barn Well and extending out from the well about 10 to 12 feet (about 3 m). The drainage tile feature did not cut through the gravel, so it is reasonable to assume that the gravels were laid down in the twentieth century after the drainage tile "conduit" was installed. The gravel might be as-

sociated with the barnyard or perhaps functioned as a parking area for machinery and vehicles used on the White Haven grounds during the Wenzlick ownership era.

The Barn Well was exceptionally well built and was lined with brick (Figure 14). The brickwork stopped at the current ground surface, and there was no appearance of bricks having been removed in the past. Nor was there evidence of a well house or well platform identified during the archeological monitoring effort. Except for an iron pipe water line that connects to the Cottage cistern and is a twentieth-century installation, there was no evidence for the manner in which the water was drawn from the well in the nineteenth century. The absence of evidence for a substantial well house or similar structure suggests that the well was covered by a platform that held an iron or wooden pump. Such a feature would not be likely to leave a strong archeological footprint. The near absence of trash fill or debris in the well attests to the fact that it was in active use into the twentieth century, probably as late as the 1960s.

The upper portion of the well was destroyed during construction of the new visitor center. Indeed the documentation effort, in part, resulted in some of the well shaft lining being removed (Scott 2003). The lower portion of the well shaft (at least 4.5 ft [2.3 m]) remains *in situ* below the contractor's basement excavation. That portion is preserved below the visitor center basement floor.

A third feature, a twentieth-century debris-disposal pit was documented between the site of the 1818 barn foundation (Figures 12, 13) and the Cottage garage during excavation of the new visitor center's and relocated Barn's basements during the second phase of the monitoring effort (Scott 2003). The pit (Figure 15) contained burned twentieth-century debris and cut sandstone blocks that undoubtedly were originally part of the 1818 barn foundation. The pit appears to date from circa 1940 and might be a debris-disposal pit dug by the Wenzlick's to bury debris that resulted from the fire that destroyed the upper floor of the Cottage during World War II. The Barn basement excavation did uncover an intact portion, the northwest corner of the 1818 barn, determining that its original western wall length was about 50 ft (15.24 m). Another archeological feature noted in the second monitoring phase is a 12-ft (3.6-m) segment of a sandstone wall or foundation. The nature and extent of this feature remains undetermined.

The final feature noted during the digging of the visitor center foundation was the base of a cistern located west of the well site and on the western edge of the foundation. No artifactual material was found in the fill of the remaining cistern base; the well's lining at the bottom was a parge coat of mortar over the natural clay walls.

2004: Geophysical Investigations at Two Residences Associated With Ulysses S. Grant

The project consisted of geophysical investigations at the Hardscrabble residence at the cemetery on St. Paul Churchyard and at the Wish-ton-wish residence on Grant's Farm (De Vore 2004). At Hardscrabble, the geophysical investigations included magnetic gradient, conductivity, and ground-penetrating radar. A total area of 6,400 m² was investigated, including 4,800 m² with a Geoscan Research FM-36 flux-gate gradiometer, 2,000 m² with a Geonics EM-38 conductivity meter, and 400 m² with a Geophysical Survey Systems, Inc., TerraSIRch SIR System 3000 with a 400 mHz antenna. The results from the magnetic gradient survey indicates a roughly triangular area in the open grassy lawn adjacent to the street. Within the triangular area of magnetic anomalies, a rectangular depression was noted in one of the grid units that might be the location of the log cabin built by Grant. Conductivity and radar data provided additional information on this portion of the site.

Wish-ton-wish is located in the ostrich and Barbary sheep pens on Grant's Farm. A 25-m by 65-m area was examined with a Geoscan Research RM-15 resistance meter using a PA-5 twin-probe array; the GSSI ground-penetrating radar unit described above was also used. The remains of the stone foundation of the residence are clearly visible in both data sets; also indicated is a well that might be associated with the residence. Although some of the foundation stones are visible on the surface, the geophysical data also suggest the location of the attached porches to the residence. In addition, both data sets indicate the presence of a lane going around the foundation and a possible outbuilding (De Vore 2004).

Chapter 4: Archeological Resource Assessment and Potential

What follows is a summary of the state of the archeological knowledge of each structure or area of ULSG investigated in the last decade. In a sense, this information is a restatement of the discussions of archeological investigations presented in Chapter 3. However, here the information is organized and summarized by building, feature, or area. Then, the archeological potential of each building or feature is discussed in terms of whether there are likely to be intact archeological deposits, and, if so, whether they are likely to yield further information useful to management. The interpretive value of what has been discovered and what may still lie buried is also considered.

The Main House

Excavations around the Main House did not prove particularly informative due to previous demolition and building or rebuilding episodes except in a few specific areas. Excavations in the Hunt Addition area between the Summer Kitchen and the north side of the Main House revealed the foundation trench and foundation stones of the addition, originally built between 1818 and 1820, and a limestone walkway leading from the Summer Kitchen to the rear of the Main House. The downhill slope to the west of the Main House produced evidence of a gravel roadway leading to the rear of the Main House. After being revealed in the archeological record, this roadway was discovered by park staff in a period engraving on file at the park of the Main House and outbuildings published October 16, 1875, in *Frank Leslie's Illustrated Newspaper*.

Limited excavations beneath the White Haven front porch indicate only that limestone walls apparently preceded the wooden pier joist supports. Other testing around the Main House demonstrated that the laying of various utility lines over the years has disrupted much of the exterior of the grounds around the house. Attempts to locate evidence of east wing room additions were unsuccessful; either earlier demolition activities destroyed any such evidence, or such evidence never did exist in a form sufficient to be detected. Similarly, work adjacent to the two chimney stacks revealed nothing that was not already known through documentary sources.

Excavations in the interior of the Main House focused on the cellar, specifically the winter kitchen. The entire winter kitchen was systematically excavated over the course of the 1995 field season. Evidence of flooring was identified during the excavations, and numerous artifacts were recovered that have shed some light on the culinary and domestic functions carried out in this room. It was in the winter kitchen that groups of artifacts were excavated that may have bearing on the religious life of the slaves living at White Haven in the nineteenth century.

The Main House has received a good deal of archeological attention since 1991, and work in and around the structure has revealed some areas to have well-preserved archeological deposits with other areas having had those same deposits destroyed by later remodeling and rebuilding. Regardless of the mixed nature of the remaining deposits, the Main House and immediate grounds should be considered likely to contain preserved information in the form of an intact archeological record. Construction, stabilization, and other ground-disturbing activities carried out in the future around the Main House should be monitored by an archeologist, except in those areas already investigated and documented in reports and maps.

The Summer Kitchen

There have been three episodes of investigation of the Summer Kitchen involving excavations both inside and outside parts of the structure. Five test units inside the structure (adapted in modern times for use as a garage before reconstruction) demonstrated that the garage's west wall was 2 m wider than the original building. In addition, testing beneath the floor revealed that a smaller foundation effectively bisected the large interior space, suggesting that a wall once divided the structure into two rooms. Fireplaces located at either end of the Summer Kitchen, of course, are consistent with that finding.

Test units along the exterior of the east wall of the Summer Kitchen revealed some interesting data. Although they did not confirm the former existence of any additional doors or windows in the structure, they did yield a large number of interesting artifacts. Furthermore, they revealed the presence of a sizeable construction trench about the foundation perimeter.

Testing in the breezeway between the Main House and the Summer Kitchen resulted in the discovery of a laundry water disposal area and demonstrated that an associated dark midden is restricted within an area from the northeastern wall of the Summer Kitchen northeastward approximately 4 m. The Summer Kitchen was built on a gentle slope and refuse was thrown behind it; the refuse accumulated to such an extent that it elevated the ground surface almost 60 cm, creating the relatively flat surface evident there today.

During stabilization work around the exterior of the building a stone foundation was discovered and subsequently documented. The stone foundation was found on the north side of the Summer Kitchen. It was found at the base of the building's foundation and protruded north about 40 to 50 cm. It is only one to two and perhaps three courses of stone thick. The feature is aligned with the north wall fireplace, but is longer. Its length corresponds to the size of the south fireplace in the Summer Kitchen. It is possible that it simply represents a fireplace foundation for the kitchen that was laid out at the time of the building's construction but was considered to be too large and thus not built.

Excavations in the building itself undertaken prior to its restoration determined that the floor was essentially destroyed by the twentieth-century remodeling of the structure into a garage. The floor, which probably consisted of a packed clay or earth, was totally destroyed. The fireplace hearths were likewise destroyed, but fire-reddened earth and a few in-place stones outlined the original hearths and hearth aprons. The hearth aprons were about 45 cm wide and probably two courses of stone high. If this reasoning is correct, then perhaps as much as 5 to 8 cm of fill and packed-earth floor were removed at the time of the remodeling.

A large number of artifacts found in the structure clustered in the western portion of the building. The artifacts date predominantly from 1835 to 1880 and correspond to what is believed to be the period of use by the Dent and Grant families. The artifacts suggest the south room was used for food preparation. However, the artifacts also suggest that both the north and south rooms were the scene of a variety of other daily domestic activities. The artifact range and distribution suggests that both rooms saw activities associated with games played with marbles, smoking of clay and porcelain pipes, sewing, and other general activities. It is not possible to unequivocally state, with the available evidence, whether the Summer Kitchen also served as a slave quarters. However, the presence of the domestic and leisure-related artifacts certainly point to the use of the building's rooms as having a residential function in addition to a food preparation function.

The Summer Kitchen's interior and the area immediately surrounding it have been the subject of three separate archeological investigations, as well as recent structural restoration and stabilization. The interior is completely excavated and is unlikely to yield new information on the Dent–Grant occupancy. The exterior for approximately 2 m surrounding the building has been tested and trenched for foundation stabilization work. That area is disturbed and should require no further archeological investigations.

Back Yard of the Main House and Summer Kitchen

The effort to locate posts or post molds associated with the board fence that once surrounded White Haven was a failure during the 2001 field investigations. The ground surface south of the Main House and to the west appears to have been modified over the years to such an extent that all indications of the fence line location, at least in the area investigated, were destroyed. One feature probably dating to 1940 was located directly east of the Main House during the search for the fence. It is an expediently dug pit used to burn windows and other debris from the 1940 White Haven remodeling episode. The presence of Parisian Green paint on several of the window pane fragments helps support the house paint scheme.

Continuing the search for a fence and a shed or privy location in 2002 did locate three wooden fence posts that represent at least two fence building episodes directly east of the Summer Kitchen. One post

likely represents a twentieth-century fence, while two other wooden posts found in the same general area probably represent one or two different nineteenth-century fence alignments. The archeologically discovered post remains and presumptive dating are consistent with known illustrations and photographs of the historic fence alignments. These illustrations suggest that alignments and style changed from time to time during the site's occupation.

Three concrete post molds discovered east of the Summer Kitchen are the foundations for an approximate 8-ft-sq building of twentieth-century origin. It might very well be the structure depicted in the 1940 HABS photograph, and might be the meditation cottage described by William Wenzlick.

The yard space surrounding the Main House and the Summer Kitchen has a light scatter of historic and modern trash covering most of the area. The yard to the south of the Main House appears to have been substantially modified over time leaving few intact archeological deposits. However, early- to mid-twentieth-century features associated with the later occupations are likely to survive and might contain useful information regarding structural modifications in the modern era. Future ground-disturbing activities in the yards surrounding both structures should be monitored by an archeologist or qualified paraprofessional archeologist given the potential to find small concentrations of period trash and the potential for buried features like pits, fences, not to mention resolution of the question of where are the latrines.

The 1868 Barn and the Well

Investigation of the two contemplated parking lot alternates confirmed the presence of debris from the former 1868 Barn complex. Shovel tests and two controlled excavations, south of the present Barn location, yielded various late-nineteenth-century artifacts but no sign of features that would indicate the locations of structural elements. Geophysical investigations in the vicinity of the original barn location located a linear anomaly that could not be defined with archeological testing. It may well be a runoff area that has a higher magnetic susceptibility than surrounding soils, or it may be a compacted zone outlining an old path or roadway to the original Barn site.

The Barn and the Barn Well are located in areas where scattered historic and modern trash remains are known to exist. No apparent features have been found archeologically, although geophysical data suggest that a path or old roadbed might exist to the south and east of the Barn's original location. It is recommended that any construction in the vicinity of the Barn's original site and around the Barn Well be monitored by a professional archeologist, as there appears to be some potential for buried materials in the area.

Geophysical and archeological investigation of the proposed Barn relocation area located stone foundations probably associated with a ca.-1818 cow barn. Two wall segments are relatively intact and quite substantial, but at least one course of stone is gone from the foundation and its integrity is compromised by the fact the remaining wall segments are not complete in either height or length. The cow barn's west wall segment was severely impacted by a pit or trench cut through it during the early twentieth century. The northwest corner was located during construction of the new visitor center. The ca.-1818 barn's west wall was determined to be 50 ft (15.2 m) long.

Backhoe trenching in the interior cow barn area found no intact floors or early-nineteenth-century deposits. The earth in the interior appears to be imported fill used to level the area for construction of the nearby garage and driveway. Four limestone footings or piers were located south of the foundation and probably represent footings for sills associated with sheds that were once attached to the cow barn.

Geophysical and archeological testing of the open area between the current site of the 1868 Barn and the Cottage yielded nothing but a light scatter of near surface trash of mixed historic and modern age. The east yard of the Cottage yielded only modern trash and evidence of modern utility lines. A brick-lined cistern exists adjacent to the Cottage that might date to the nineteenth century.

The Barn Well was documented during visitor center construction monitoring. The well is a substantial, brick-lined shaft about 20 ft (6 m) deep. Documentation work indicates the well was used into the mid-twentieth century.

The Ice House

Testing and excavations in and around the Ice House have yielded very little to clearly define the function of the building earlier than the twentieth-century use. The floors appear to have been made of packed earth or clay. The only features identified were a clay drainage tile in the north room's north wall, and a builder's trench in the south room. The presence of the drainage tile, and an older one found during the restoration work deposited in the fill outside the building, suggest the structure has had drainage problems for a long time. The artifacts found in the building nearly all postdate 1875, suggesting that a cleaning or remodeling, or perhaps a building episode, occurred about that time.

It is clear that the north room was used, in the early years of the twentieth century, as a catch-all storage facility. The south room contained evidence that it functioned as a smokehouse, albeit an informal one, during the twentieth century. This archeological data is consistent with the oral traditions of the last owners of White Haven.

Test excavations north of the Ice House indicate this downhill slope has a light scatter of historic and modern trash over most of its area. One feature that may be a wagon wheel rut was identified near the front of the Ice House, possibly a formal or informal wagon trail ran along the slope. It seems logical to suggest that the trail might be associated with the filling of the structure with ice during the winter months.

The Ice House is completely excavated and no further work should be required in the building itself. The area to the north or downslope from the Ice House has not been extensively documented. The limited investigations undertaken there suggest that trash will be common and that a wagon road or trail once existed in that area. This downslope zone should be considered archeologically sensitive for future planning and if ground-disturbing activities are to be undertaken in this area archeological investigations should precede any earthmoving activities.

The Chicken House

Archeological evidence from the downslope area north of the Chicken House also suggests that general household refuse was deposited there in the 1830s, 1840s, and 1850s. Artifacts consisted primarily of clay flowerpot fragments, bottle glass, and cut nails. Many large concrete fragments and stones were concentrated at the back of the structure. These may have been placed in order to control erosion under the building, as an obvious drainage channel ran from the east corner under the building through the back center of the structure.

A large concentration of complete bottles and bottle fragments was found on the north slope of the building near one of the piers. The bottles uncovered in the Pier H hole date generally to the late nineteenth and early twentieth centuries supporting the notion that the downslope area around the Chicken House and the Ice House is a trash disposal area, probably in continual use from at least the 1830s until the site was acquired by the National Park Service. As with the recommendations for the Chicken House, this downslope zone should be considered archeologically sensitive for future planning, and if ground-disturbing activities are to be undertaken in this area archeological investigations should precede any earthmoving activities.

North Area, Maintenance

Excavation and testing in this area produced very few artifacts. The few artifacts discovered were not concentrated in any one area but were scattered and appear to be randomly deposited materials. While some of the discovered artifacts date to the Grant period, others were of recent age. No subsurface features were detected during testing, and it is evident from the excavations in this area that no subsurface features or significant concentrations of cultural materials are likely to be present. Archeological monitoring of previously undisturbed areas might need to be undertaken in this area if ground-disturbing activities are planned. However, given the essentially negative results of archeological work to date in this area, the need for archeological services in this park area can be evaluated on a case-by-case basis.

Chapter 5: Archeological Resource Recommendations

Over a decade of cultural resource management driven studies within the park have yielded a large amount of data about the presence and absence of archeological resources at Ulysses S. Grant NHS. Excavations in and around the Main House and the Summer Kitchen in particular have yielded an impressive number and variety of artifacts as well as delineated several important features. The various project work also found that urban development destroyed or damaged some areas and features. While not every archeological element of the site has been studied in detail, the variety of excavations has allowed a significant sample of the subsurface to be examined for the presence or absence of archeological elements of the site's past.

This overview has reviewed the archeological investigations done to date. Recommendations are presented regarding the interpretive and research potential that the archeological resources have relative to the park's overall management strategies and development plans. Finally, recommendations are provided for long-term archeological studies that will assist the program management decision-making process.

Resource Protection

Most potential impacts to archeological resources at Ulysses S. Grant National Historic Site are likely to occur as part of park development efforts. Definable impacts to archeological resources can be predicted based on parkwide development plans. Actions that could potentially impact archeological resources include development of park facilities (trails, buildings, etc.), street removal, tree removal and planting, and landscaping (cutting and filling).

Avoiding impacts to the archeological resources by project design or redesign is always the preferred action as stated in NPS policy and federal regulations. By way of example, where possible, new utilities should be placed in previously existing utility line corridors or routed along former road beds, prior disturbed areas, and locations containing recent fill deposits. When ground-disturbing activities are implemented in areas that contain intact buried archeological deposits, then appropriate measures should be undertaken to mitigate the project's effect on the archeological resource based on the recommendations for each area presented in Chapter 4.

Mitigation efforts could range from monitoring such work as utility trenching, shovel testing, to more comprehensive excavation and documentation. The type of archeological investigation required should be developed as part of the project planning process and at the earliest possible stage so that compliance with Section 106 of the Historic Preservation Act, as amended, can proceed in a timely and cost-efficient manner.

Interpretive Potential and Research Priorities

Archeological data offer significant research potential and can enhance park interpretation. The purpose of this section is to identify potential research opportunities and interpretive potential of the archeological resource base at Ulysses S. Grant National Historic Site.

The management plans call for an integrated action plan and recommend specific actions to enhance visitor understanding of park history and to compliment historic resource integrity. These actions include removal of noncontributing features, site regrading, and the development of walkways and related features in historically accurate locations. Compliance projects conducted at ULSG have provided a good deal of information about the archeological resource base in many park areas. A comprehensive parkwide survey, however, has never been undertaken. Such an investigation is recommended to provide supplemental information for making informed management decisions and for implementing development actions.

Archeological research should focus on areas most relevant to these overall park management objectives by:

- (1) locating and delineating structural remains, particularly slave cabins and associated features if they exist on the property, although it appears that these sites were destroyed during the construction of the housing development north of Prairie Spring in the 1950s;
- (2) acquiring structural data to permit accurate delineation of foundations of any non-extant structures such as the cow barn and other early site structures;
- (3) establishing elevations of former historic grade throughout the park; and
- (4) identifying paths and vegetation.

A comprehensive parkwide inventory should include:

- (1) multi-instrument geophysical remote-sensing inventories to locate and delineate archeological features as well as to determine where no features remain intact throughout the park;
- (2) limited testing for verification of remote sensing information and for data recovery; and
- (3) for dating purposes, limited testing to recover data from buried deposits and historic ground levels.

The Systemwide Archeological Inventory Program (SAIP) provides the mechanism through which funding can be secured to implement such a parkwide inventory and testing effort. This program allows for multiyear investigations and reporting to be accomplished for such diverse projects. Project statements and justifications need to be placed and prioritized in the park's Project Management Information System (PMIS) project statements.

Systematic Artifact Study

By necessity, the archeological projects done for ULSG to date have been narrow in scope. One result is that a holistic study of artifacts recovered from all park contexts has not been possible. A comprehensive study and analysis of the artifacts and their proveniences could shed light on the lifestyles of the occupants of site, especially of the Main House and the Summer Kitchen. Such a study has the potential to look at and contrast the quality and quantity of material culture items between the various structures and contexts within the buildings to determine social and economic status of the people living in and using the buildings. Not only the Dents and Grants can be studied, but the later owners and occupants as well. The rich historical record relating to the post-Grant ownership, particularly that of the Wenzlicks, can be used to build and test hypotheses regarding ownership, occupancy, social status, and wealth.

Another area worthy of investigation is the role and status of slaves and slavery at White Haven. If archeological evidence of the slave cabins can be identified, there is a significant potential to study the role and status of slaves of the Dents and Grants. The artifacts recovered from the Winter and Summer Kitchen excavations provide one data set that can be studied and analyzed now. That data set can be used to build models of African-American status at White Haven and can be used for comparison with data from the slave cabins, if they can be found, as well as other models of African-American status from other contexts west of the Mississippi and in the southern and eastern areas of the United States.

Archeological investigations of slavery and African Americans have gained momentum in the last decade, and numerous reports and articles have been written on the subject. These provide the background to formulating questions that can be studied using the available ULSG archeological data. A selected bibliography of the archeology of slavery and African Americans is included with this overview and assessment as an appendix to serve as a point of reference for developing research questions. However, Timothy Baumann's (1996) study of African-American archeology in Missouri establishes a series of broad research questions that should be used in the formulation of any ULSG specific research efforts. Baumann (1996) has developed three broad themes as general and comparative research topics: the study of everyday life, the study of social and economic relationships, and determination of ethnicity. He develops these for all periods of Missouri settlement as a way to develop meaningful comparison across space and time in the archeological study of slavery and African-American occupation.

Within the National Park Service, the most appropriate funding sources for such analyses are either Cultural Resources Planning and Preservation Base funds (CRPP-Base) or park Fee Demonstration funds where the project can be tied directly to interpretation and exhibit purposes. Another possibility for accomplishing the study would be for the park to develop a relationship or cooperative agreement with one or more selected university anthropology graduate programs. Such a relationship might provide the park with one or more students who could research various aspects of the wealth and status of the occupants as well as the slavery issue at ULSG. There are many potential studies that could be undertaken with little or no cost to the park with the ultimate result being a greater understanding of the Dents, Grants, and later occupants social and economic status and the role and function of slaves and African Americans at White Haven. Any agreements developed should be carefully written and expectations clearly stated so that the cooperating parties may achieve the desired result in a reasonable time.

Potential Park-Related Archeological Investigations

White Haven and the Dent land holdings were once very large. Ulysses S. Grant NHS presents a rather diminished view of those much larger land holdings. Two specific sites that have direct links to the Grant occupancy and ownership are not within ULSG. The sites of the house that Grant himself built, Hardscrabble, and the Dent home of Wish-ton-Wish are reasonably well known. However, no detailed studies of either site have ever been done. Both sites appear to have archeological potential based on recent geophysical investigations (De Vore 2004).

Hardscrabble

The log structure purported to be Grant's Hardscrabble was moved from its original site and reassembled on the Busch Grant Farm where it can be seen by Grant Farm visitors and by travelers driving along Gravois Road. The original site of Hardscrabble is now a part of St. Paul's Churchyard, located about ½ mile north of White Haven. The cemetery was established in 1925 to relocate graves from the earlier St. Paul's cemetery that was being destroyed by suburban development to a new tract where perpetual care could be ensured. Section 1 was set aside as a memorial to the Grants as this hilltop was believed to be the site of Hardscrabble. The presumed site of the cabin was marked by a Daughters of the American Revolution bronze plaque in 1947 (Morris 1999–2000, Area C-4). The area marked by the DAR plaque appears undisturbed and except for roadways into the cemetery proper is a grassed landscape.

If the site is undisturbed there is a potential for archeological features related to the Grant occupancy to remain at the site. It is recommended that ULSG staff consider developing a cooperative relationship with a local institution or other professional archeologists to investigate the original Hardscrabble site. Recent geophysical investigations indicate the existence of anomalies that can be archeologically investigated. A plan for archeological testing and/or excavation should be developed and undertaken. Any archeological investigation is predicated on the assumption that permission can be secured from the appropriate authorities to conduct such investigations.

Wish-ton-Wish

Wish-ton-Wish was a large stone house constructed by Lewis Dent in 1848 and 1849 on the western side of the Dent property (O'Bright and Marolf 1999:2.61). The Grants resided in the house for a short time and eventually acquired the property by purchase from the Dent family. Like Hardscrabble, the site of Wish-ton-Wish, which was destroyed by fire in 1873, is relatively well known. Stone foundations are extant on the western edge of Busch's Grant Farm.

It is recommended that ULSG staff consider developing a cooperative relationship with a local institution or other professional archeologists to investigate the Wish-ton-Wish site given the cooperation of the Grant Farm owners. The building foundations and other features that are likely to remain can be archeologically tested and/or excavated to determine room arrangement and probable function, at least for the lower floor. In addition, construction methods and materials can be determined, and perhaps specific features identified and tested. A multi-instrument geophysical survey was recently conducted of the area

around the structural foundations; these investigations revealed anomalies consistent with outbuildings and roads. Additional geophysical investigations and archeological testing are recommended. Since the Grants are known to have occupied the home during their visits to White Haven during his Presidency, there is a potential to recover artifactual material that might be directly associated with Grant during those years.

Conclusions

Collecting and analyzing the above information is essential to the determination of individual features and areas as a contributing or non-contributing resource to the significance of Ulysses S. Grant NHS. Knowledge of features and areas significance is in turn critical to making informed management decisions when even small-scale construction and/or development activities must be undertaken to provide visitor services such as new trails, enhance the viewshed through vegetative manipulation, and other activities. Given the extent of the known features, such as the Summer Kitchen and the cow barn as well as the presence of many structural elements and features, across the entire landscape, almost any ground-disturbing activity at most locations in the park will technically constitute an undertaking. Park staff members have been exemplary in implementing all aspects of compliance with the Historic Preservation Act as amended. They should continue to routinely engage the Section 106 compliance process in order to seek concurrence from the State Historic Preservation Officer or develop a park-specific programmatic memorandum of agreement to define categorical exclusions for routine work.

Many of the visitors from the immediate area are interested in archeology. One outcome of a park-wide inventory and the potential for working with sites related to the lives of Dent and Grant in nearby areas would be a more complete understanding of the prehistory and history of land use in the area through time. Volunteers have participated in most of the archeological projects undertaken to date. That effort should continue as interested volunteers not only provide real and valued assistance to a project, they also function as unofficial good will ambassadors to the local community for the site and its long-term preservation and study.

The visiting public's interest in archeology and history can be addressed through a variety of means. Interpretation of any ongoing archeological projects can be included in park tours and/or announcements at the visitor contact areas. The artifacts resulting from archeological investigations may very well aid in presenting a more complete picture of the history to the visitor by presenting the physical evidence to them. In turn, the data generated by archeological work can be used by park interpreters to enhance site interpretation through exhibits, personal presentations, brochures, and publications.

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Figure 1. A nineteenth-century illustration of the Dent farmstead showing the Main House, the Summer Kitchen, and the Ice House.

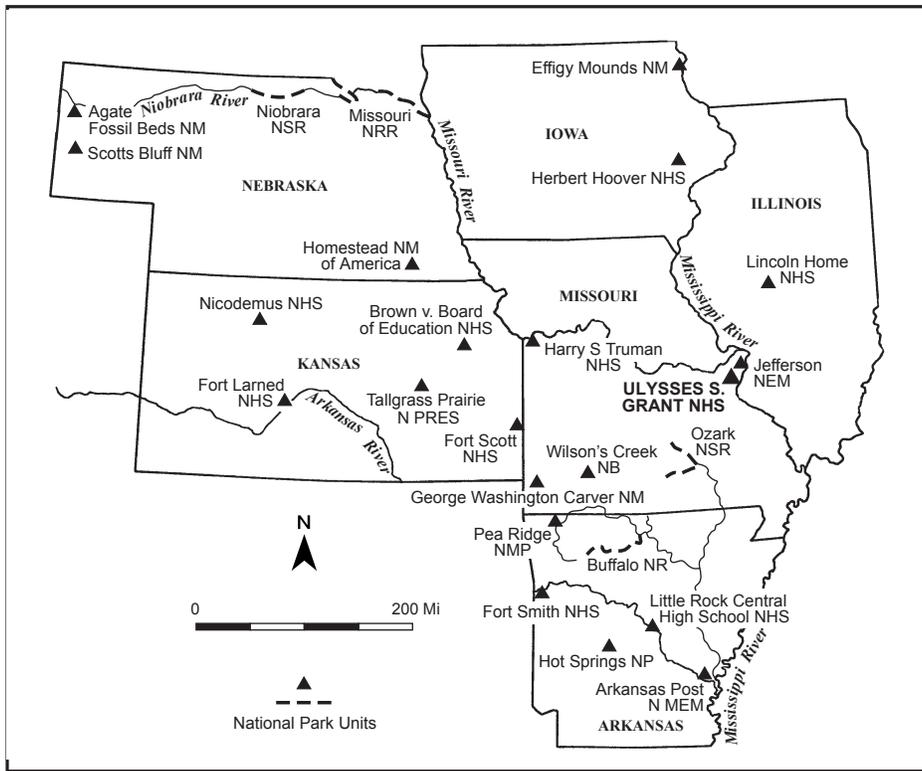


Figure 2. The location of Ulysses S. Grant National Historic Site.



Figure 3. Ulysses S. Grant NHS depicted on the 1979 USGS 7.5-minute Webster Grove quadrangle map.

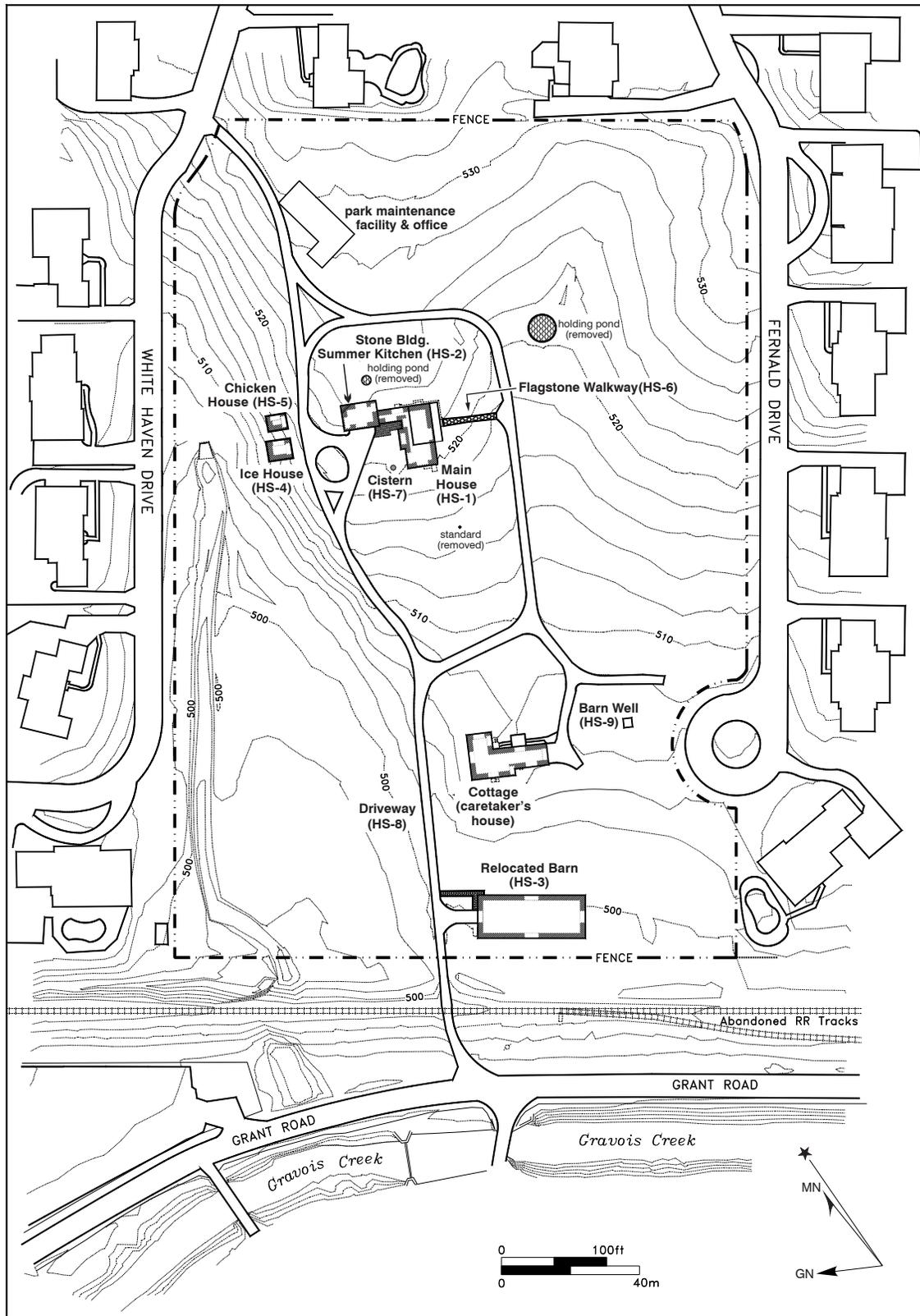


Figure 4. Ulysses S. Grant NHS, extant structures as of 2003.

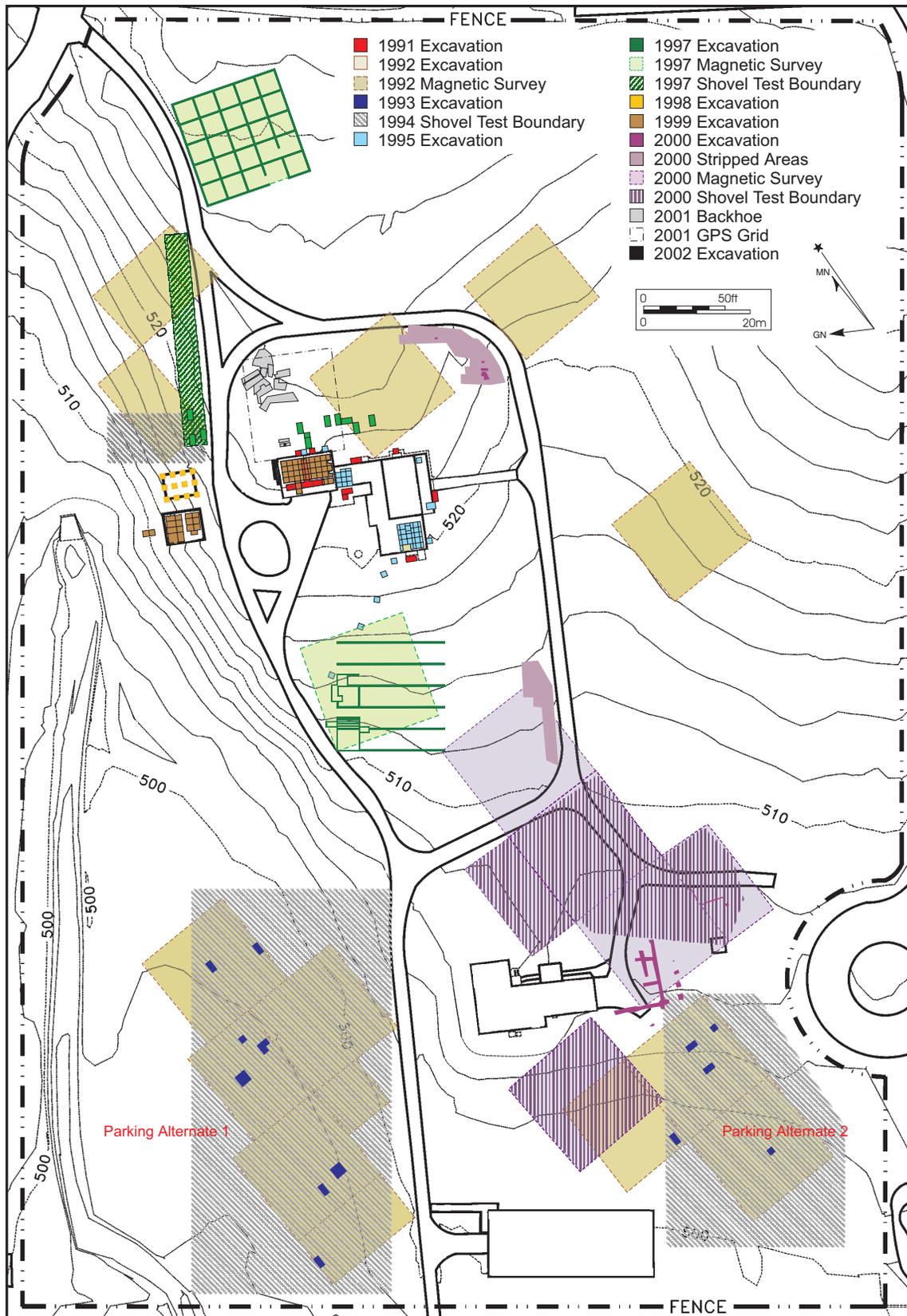


Figure 5. Ulysses S. Grant NHS site plan showing areas of archeological investigation from 1991 through 2002.



Figure 6. Excavations of the east chimney of the Main House (HS-1) in 1991.



Figure 7. The Hunt Addition was investigated in 1995.

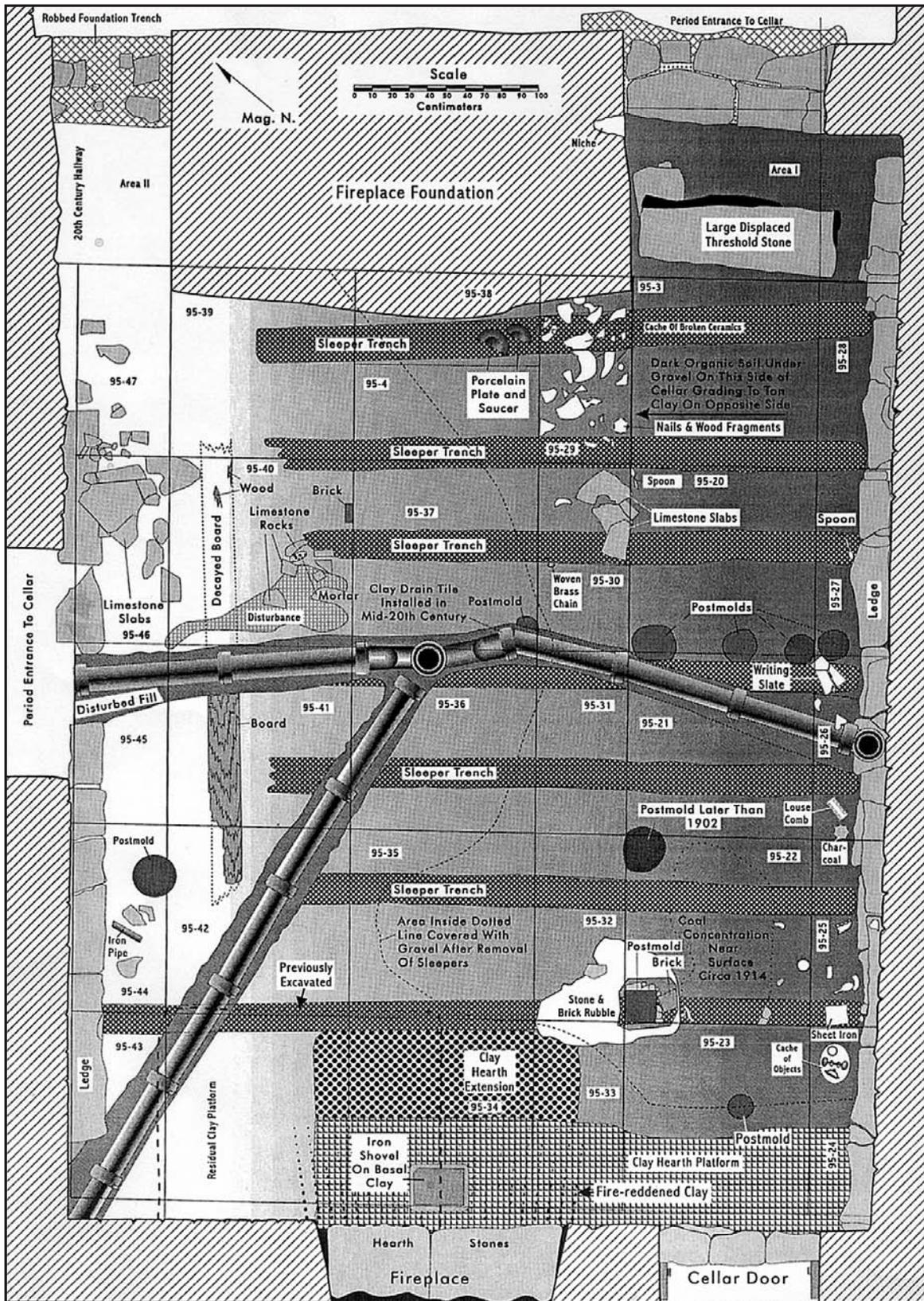


Figure 8. Plan of the archeological features found in the cellar or winter kitchen in the Main House during 1995; after Price 1995.



Figure 9. Excavation of the area under the Chicken House (HS-5) took place in 1998.



Figure 10. During 1999 the Summer Kitchen (HS-2) was excavated in preparation for its restoration; some of the excavation units and the large fireplace in the kitchen's south room are shown.



Figure 11. Geophysical remote sensing work with a fluxgate gradiometer was undertaken in 2000 as part of project planning work to relocate the 1868 barn out of the floodplain.



Figure 12. One feature found during the 2000 shovel testing and further extensively tested is a massive stone foundation that is probably associated with an 1818-era barn.



Figure 13. The October 16, 1875, issue of *Frank Leslie's Illustrated Newspaper* depicts from right to left the first location of the 1868 Barn (HS-3) built by U.S. Grant, the hipped-roof cow barn that may date as early as 1818, and shed that is similar in configuration to the Chicken House (HS-5).



Figure 14. The shaft and the lining of the Barn Well in profile after the collapse of the west wall. Vertical scale is approximately 14 feet from ground surface to the base of the well; view is to the east.



Figure 15. Rectangular mid-twentieth century pit feature located during new visitor center basement excavations grid south of the cottage. The feature destroyed much of the 1818 barn foundation when it was dug to dispose of demolition debris after the fire that destroyed the upper floor of the cottage during World War II.

**Appendix: Selected Bibliography of the Archeology of Slavery
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