PHASE III ARCHAEOLOGICAL MITIGATION OF THE JONES/HILLERMAN SITE (11Mx306), RURAL MASSAC COUNTY, ILLINOIS

by
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Acknowledgements

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COVER ILLUSTRATION:

Left: Location of the Jones/Hillerman Site in Southern Illinois, as illustrated on *The Travellers Pocket Map of Illinois* (Tanner 1830). The approximate location of the site is circled in red.

Right: Detail from *Family Life on the Frontier*, painted by George Caleb Bingham sometime shortly prior to 1845 (Shapiro 1993:8).

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Introduction

This report summarizes the results of archaeological investigations conducted by Fever River Research (Springfield) at the Jones/Hillerman Site (11Mx306)—an early nineteenth century rural habitation and/or farmstead located approximately 2 miles northwest of Joppa, Massac County, Illinois (see Figures 1-3). Joppa is located approximately 7 miles downriver from the county seat, Metropolis. This historic archaeological site, which represents one of the earlier documented rural sites identified in this township, was located on the eastern slope of an upland ridge overlooking an unnamed tributary that flows into the Ohio River—which is located approximately one mile to the south. At the time of the field investigations, the site was situated within a large agricultural field used for cattle grazing, but slated for development as a landfill for the Electric Energy, Inc. Joppa Generating Station's CCB Management Facility (see Figure 2). The Joppa Generating Station is located along the north bluff of the Ohio River, approximately 1½ miles to the southeast of the Jones/Hillerman Site.

The Jones/Hillerman Site (11Mx306) was identified in late 2007 during a Phase I archaeological survey conducted by Fever River Research of the 155-acre CCB Management Facility where a proposed landfill is to be developed (Mansberger 2008). The surface artifacts recovered from the site suggested that it was associated with a short-term farmstead occupied during the later 1830s or 1840s. Mansberger (2008) recommended that Phase II testing be carried out at the site, in recognition of the potential contribution the site could have to our understanding of the early American occupation of this region. Upon review, the Illinois Historic Preservation Agency (IHPA) determined that site 11Mx306 was potentially eligible to the National Register of Historic Places under Criterion D (archaeology) and indicated the need to either: 1) protect the site with a deed covenant, in the event that the proposed development posed no adverse affect; 2) or conduct Phase II archaeological investigations prior to construction in order to evaluate the significance of the site. In May 2008, Phase II archaeological testing of the Jones/Hillerman Site was conducted by Fever River Research. Based on the Phase II investigations, the archaeological site was determined eligible for listing on the National Register of Historic Sites (Mansberger and Stratton 2008; Haaker 2008 [IHPA Log No. 2020108]). As the Jones/Hillerman Site could not be avoided by the planned development, Phase III archaeological mitigation was initiated by Fever River Research in late 2008. All phases of this work was conducted by Fever River Research, Inc. under subcontract with Hanson Professional Services, Inc. (Springfield, Illinois).

The archaeological investigations conducted at the Jones/Hillerman Site have illustrated that this site was relatively undisturbed and had well-preserved subsurface features dating from a circa 1835-45 context. As the site appears to have been occupied for a relatively short-term period of time, it has provided researchers with an invaluable glimpse into the material culture and lifeways of an initial settlement-period rural habitation and/or farmstead in present-day Massac County, Illinois. The results of the archaeological mitigation are the focus of this report.

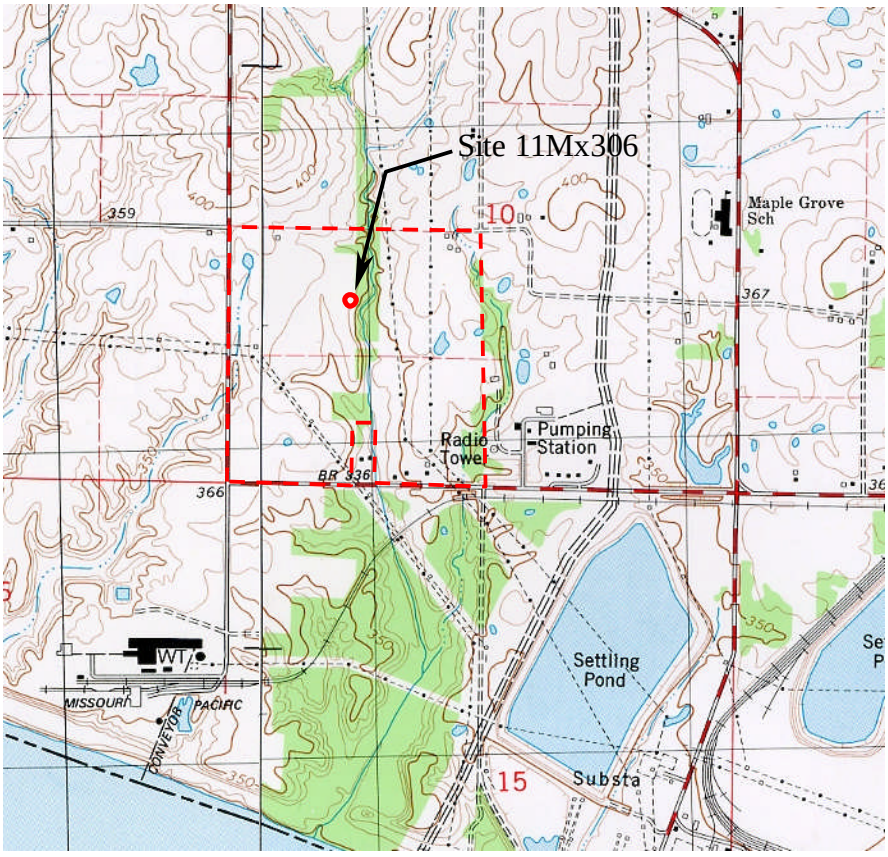


Figure 1. Location of the Jones/Hillerman Site (11Mx306) and the CCB Management Facility, Electric Energy, Inc., Joppa Generating Station, Massac County, Illinois (*Bandana and Joppa, Illinois,* 7.5 Minute United States Geological Survey topographic quadrangle maps, 1982). The CCB Management Facility, the greater project area, is outlined in a dashed red line. North is to the top of the page.

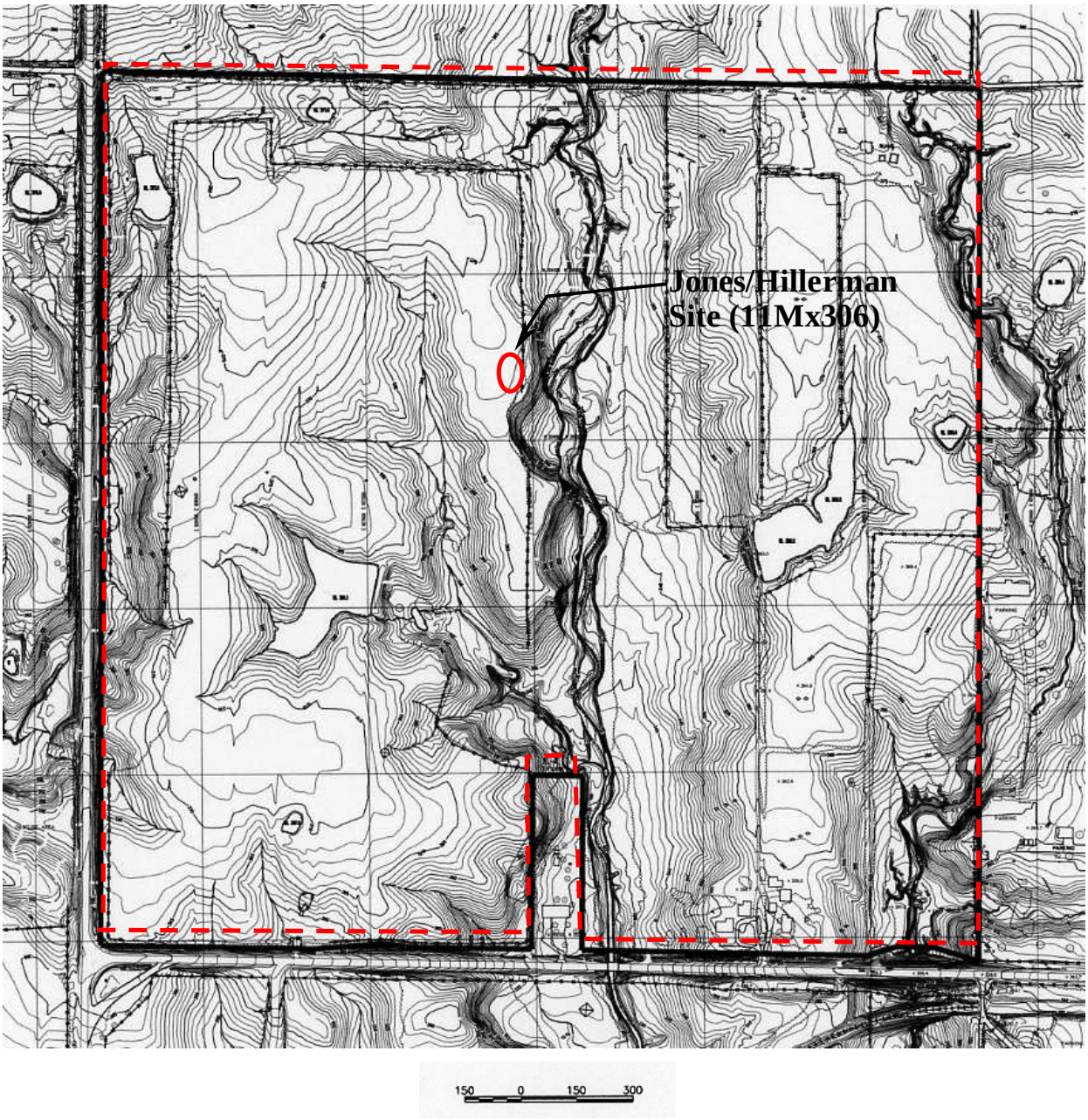


Figure 2. Existing site plan map of the CCB Management Facility, Electric Energy, Inc., Joppa Generating Station, Massac County, Illinois. The project area is outlined in a dashed red line and the Jones/Hillerman Site (11Mx306) is circled in red. North is to the top of the page.

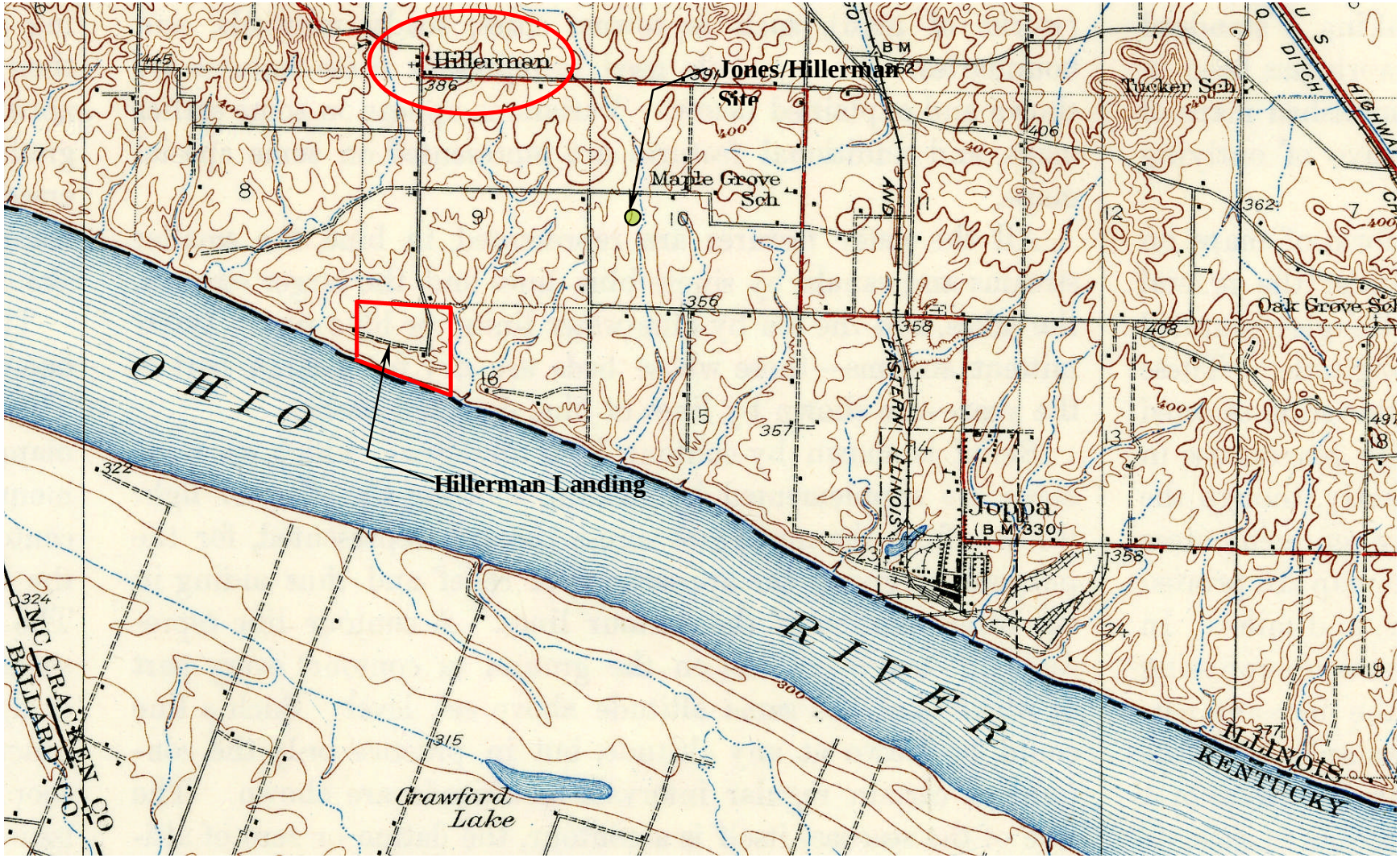


Figure 3. Location of the Jones/Hillerman Site (11Mx306) in rural Massac County, Illinois (*La Center, KY-ILL*, 15-Minute United States Geological Survey topographic quadrangle maps, 1932). North is to the top of the page.

Environmental and Regional Settings

The Jones/Hillerman Site (11Mx306) is located in the NW¼, SW¼, Section 10, Township 15 South, Range 3 East (Hillerman Township) in south-central Massac County, Illinois (Figures 1-3). Massac County is situated along the Ohio River near the southern tip of the state, within sight of adjacent Kentucky. The Ohio River has played an important role in the social and economic development of the county. The Jones/Hillerman Site is located along the west slopes of an unnamed tributary valley/drainage, approximately one mile from the Ohio River valley bluff crest. The project area is situated approximately one mile from the divide between the Ohio River valley and the Cache River valley to the north (Figures 1-3). At the time of initial European settlement, the majority of the project area was in timber vegetation (see Figure 4). The greater project area is situated within the Cretaceous Hills Section (a) of the Coastal Plain Division (14) as defined by Schwegman (1973:2). The historic site is situated within a tract of soil mapped as Hosmer Silt Loam (soil mapping unit 214B) (Parks 1975) (see Figures 4-5).

Hillerman Township is a fractional township that lies along the north shore of the Ohio River. It consists of 12 full sections and 6 partial sections abutting the river edge. The divide between the Ohio River and Cache River drainages runs through the northern portion of the township (Figure 6). As such, several small, unnamed drainages flow into in a southerly direction into the Ohio River valley. The northeastern portion of the township drains into the wet bottoms of the Cache River. The 1807 U.S. General Land Office survey plat noted that the entire township was forested. An early 1860s map of the region (*Atlas to Accompany the Official Records of the Union and Confederate Armies 1861-1865*) documented the bluffs along the north rim of the Ohio River between Metroplis and Napoleon as a "Ridge of Dry Barrens"—suggesting that the area was of marginal quality for farming during the early years of settlement (Davis et al. 1978:Plate CXIII). The use of the term "barrens" suggests that this area had become deforested by this date.

This stretch of the Ohio River lacked an expansive floodplain—at least on the Illinois side of the river. As such, bottomland resources typically associated with backwater lakes and lowland plains were not easily accessible. The Ohio River was a fairly slow moving river, and on the average, dropped only 6" per mile over its course prior to the construction of the current lock and dam system. But at Louisville, an abrupt drop of 25' was encountered at what was known as the "Falls of the Ohio." By the 1820s, a canal was constructed around this impediment to travel, and greatly facilitated the development of Louisville, which, among other things, developed as major meat packing district and became a distinctive "southern" community. Its major trade rivals, and more northern oriented communities were Cincinnati, and to a lesser degree, Evansville (Hudson 2002). The Jones/Hillerman Site is located along the north bend of the Great Bend of the Ohio River, which is near the Little Chain of Rocks. Wilkinsonville, also known as Cedar Bluffs, was located near the Grand Chain of Rocks, slightly farther downstream (Ashe 1808; Tanner 1830).

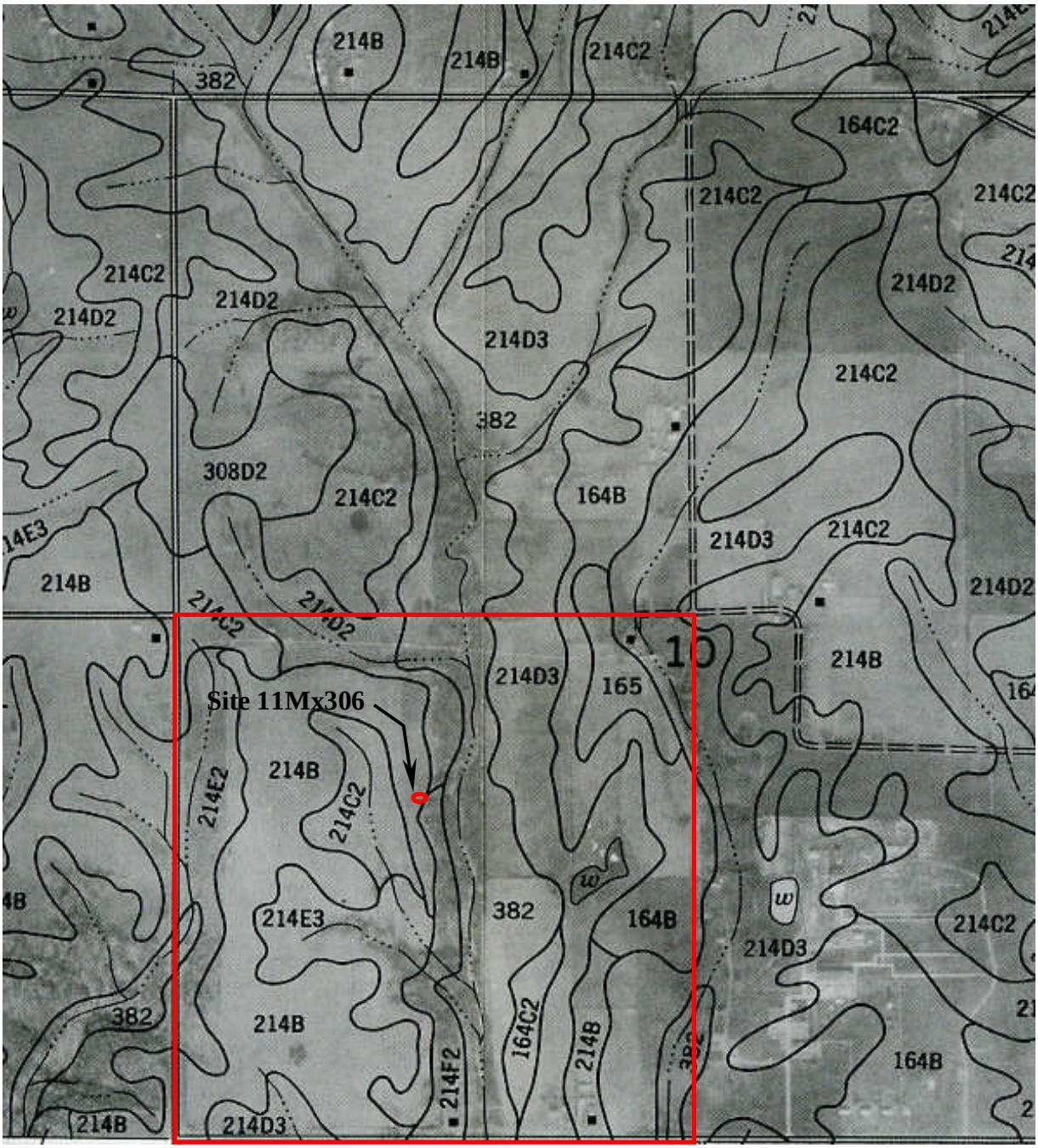


Figure 4. View of the Jones/Hillerman Site (11Mx306) and the CCB Management Facility, Electric Energy, Inc., Joppa Generating Station, Massac County, Illinois as illustrated on the Massac County soil map (Parks 1975; Plate 92). The project area is outlined in a solid red line. North is to the top of the page.

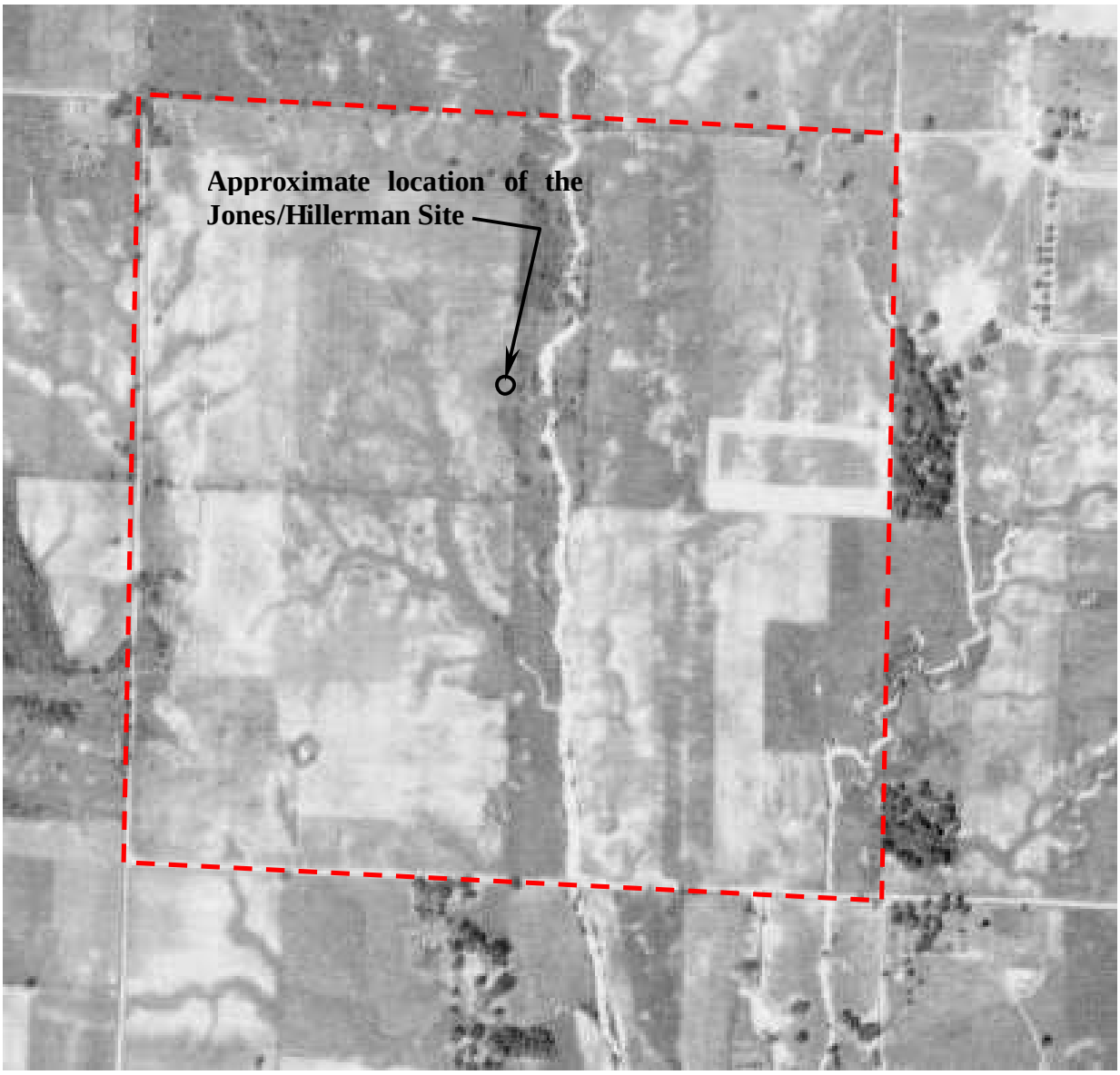


Figure 5. Location of the Jones/Hillerman Site (11Mx306) and the CCB Management Facility, Electric Energy, Inc., Joppa Generating Station, Massac County, Illinois as illustrated on the 1938 USDA aerial photograph (USDA 1938). Only one historic farmstead appears in the project area at this time. The project area is outlined in a dashed red line. The approximate location of the Jones/Hillerman Site is noted. North is to the top of the page.

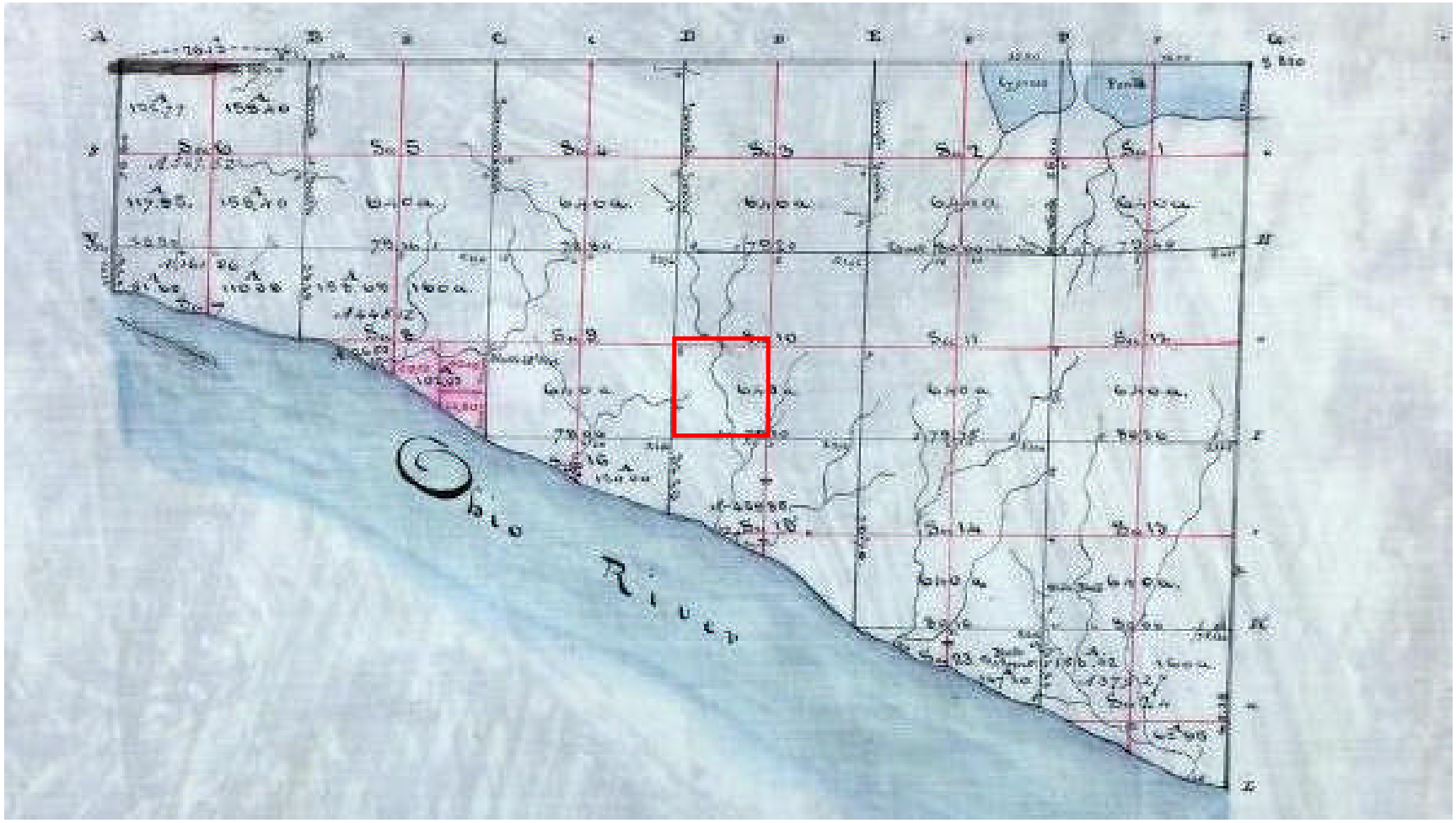


Figure 6. View of the 1837 U.S. General Land Office survey plat for Township 15 South, Range 3 East, Massac County, Illinois (USGLO 1807, 1837). The project area is outlined in red; north is to the top of the page. Note the project's proximity to the divide separating the Ohio and the adjacent Cache River drainage to the north.

Historical Setting

Regional Context

Much of the early history of Massac County has focused on the history of Fort Massac, which was established by the French military in 1757 along the north banks of the Ohio River. The site of Fort Massac, which today is a state park managed by the Illinois Department of Natural Resources, is located approximately 12-13 miles upriver from the Jones/Hillerman Site. As established by the French, the fort was known as "Fort L'Ascension." The primary purpose of the post was to guard the mouth of the Tennessee River, which is located two miles further upstream. The Tennessee River served as a convenient avenue of attack for the Cherokee and other southern tribes allied with the British in staging raids against French settlements in the Illinois Country. Abandoned by the French in 1764, the fort site was reoccupied by the American Army in 1794. Except for a brief period (1801-1802), the fort was garrisoned by the Americans continuously until 1814, at which time it was abandoned. During this period a small settlement, known informally as "Massac Village," developed in the immediate environs of the fort. At its height, this village may have contained upwards of twenty houses. The fort site was briefly reoccupied by Illinois volunteer troops during the American Civil War, at which time several barracks and a hospital were erected there. In 1903, the State of Illinois purchased 24 areas surrounding Fort Massac and preserved the area as a state park. Fort Massac has been well documented, most recently in the report entitled "Fort Massac: The Archaeology of the American-Period Fort" (Mansberger 2002).

Similarly, the community of Wilkinsonville (also known as Cedar Bluffs) was located approximately 15 miles downriver from Fort Massac at a location known as Chain of Rocks or Grand Chain (Ashe 1808). This "community" was established as a military fort known simply as "Cantonment Wilkonsonville" in late 1800, and probably abandoned during early to mid-1802 Shortly after its abandonment by the U.S. military, the site was occupied by a group of Cherokee through late 1807 or early 1808. The 1810 U.S. Census noted the presence of Euro-American settlers in the community at that date. The 1820 Federal Census does not indicate any inhabitants at this location at that date (Caldwell 1949, Wagner 2009). Although Melish's 1819 *Map of Illinois* illustrates the town of Wilkinsonville, both Tanner's *Travellor's Map of Illinois* (1830) and Burr's *[Map of] Illinois* from 1834 fail to illustrate the town (see Figures 7-10). All three maps depict a road running along the north edge of the Ohio River, and no doubt passing in close proximity to the Jones/Hillerman Site.

As expected, the early historic settlement in the region centered on the area around Fort Massac and along the Ohio River. One of the earlier communities along this stretch of the Ohio River was Golconda—which was established as an Ohio River ferry crossing during the late 1790s. Golconda is located approximately 38-miles upriver from Metropolis, and approximately 20 miles overland from the Jones/Hillerman Site. During these early years of settlement, the project area was part of the larger Johnson County. Massac County was not formally established until 1843, being divided off of both Johnson (established in 1812) and Pope (established in 1816) counties. With the formation of Massac County in 1843, Metropolis was platted and

established as the county seat. Across the Ohio from Metroplis is Paducah and the mouth of the Tennessee River. Downstream from the project area was the small community of Napoleon, and North Caledonia. Further downstream, at the mouth of the Cache River, was Mound City.

Prior to the U.S. Government sale of federal lands in the Northwest Territory, the government employed land surveyors to lay out the lands in a rectangular grid system. The basic unit of this system was a 6-mile square township consisting of 36 individual one-mile square sections. At the time of the survey, the surveyors created a series of township maps that illustrated natural features such as vegetation patterns, stream locations, and occasional cultural features such as roads and cultivated fields. Sections and/or partial sections of lands of early settlement on these maps often are marked with the large letters "AP". A contemporary nineteenth century explanation of these letters has not been found. As these lands did not become available for sale by the Federal Government until 1814, it has long been assumed that these "AP" designations referred to lands already applied for by preemption or patent. Based on preemption rights, this would suggest that these "Applied For" lands were potentially inhabited or improved by squatters prior to the official availability of the land for sale in 1814.

Hillerman township was surveyed along with surrounding townships in 1806, and these "AP" designations would have been applied either at the time of the survey, or shortly thereafter (between 1806 and 1814). All of the lands marked with an "AP" in Hillerman Township were located along the Ohio River bluff, and do not extend into the timber away from the main river trench. A couple of small parcels of land located along the bluff—such as Section 16 (the lands associated with the townsite of Hillerman)—lack the "AP" designation. The impression is that the lands marked "AP" in Hillerman Township were not improved by 1807, but were improved sometime after that date and prior to the 1814 sale of the lands by the federal government and having been written on the maps by Land Office personnel as the lands were being claimed. In support of this, these designations are written in a different colored ink, and apparently by a different hand. It is also of interest to note that the lands marked "AP" along the river were all purchased in 1816-1818, which predates by a decade or more the purchase of the lands lying inland from them (Figure 7).

River Landings along the Ohio River were an important center of commerce and trade during these early settlement years. Although there were, no doubt, many an early squatter located on lands along the Ohio River and its tributaries in this region by the 1820s, much of the upland agricultural lands in the county were not settled until the 1830s-1840s—a pattern that is consistent with the Jones/Hillerman Site. Prior to the Economic Panic of 1837, easy money and speculation in new town formation was rampant.

One of the earlier cartographic resources to depict a relatively modern—albeit early nineteenth century—landscape was John Melish's *Map of Illinois* (Melish 1819) (Figure 8). Although this map depicts the entire state of Illinois, as would be expected for this early date, cultural details are concentrated within the southern third of the state at this time. Union, Alexander, Johnson, and Pope Counties had been established along the southern border of the state, with the project area incorporated into the greater Johnson County. Only two communities were noted in Johnson County at that time. These consisted of Vienna (the county seat), and Wilkinsonville. Two early roads cutting across Johnson County had been established by this

early date. One of these roads originated at nearby Fort Massac and passed in a northwesterly direction passing through Vienna and heading towards its destination, Kaskaskia. This route probably was established sometime during the later half of the eighteenth century. The second road documented on this early map is a route that traverses the uplands along the north bluff crest paralleling the Ohio River valley from the mouth of the Cumberland River (near Smithland) to the mouth of the Ohio (near Cairo). This road entered Illinois (from Kentucky) near Smithland on the east, and exited the state crossing the Mississippi River into the Missouri Territory immediately north of Cairo. At this early date, the road passed through the communities of Fort Massac, Wilkinsonville, America, and Cairo along its path. Additionally, the route must have taken a route that passed in very close proximity to the Jones/Hillerman Site.

David Burr's 1834 map of Illinois (which was simply entitled *Illinois*) illustrates a similar landscape for southern Illinois (Figure 9). At this point in time, the Fort Massac "community" is referred to as Belgrade, and the community of Wilkinsonville is no longer illustrated on the map. Similarly, two additional roads are depicted in Johnson County—both originating in Vienna and proceeding to the east (with one road heading to Shawneetown, and the other to Golconda). Tanner (1830) indicates the presence of an additional early road that originated from the approximate location of the town of Wilkinsonville (and/or the Grand Chain, near the great bend of the Ohio River) heading north to Vienna (Figure 10).

As noted earlier, an early 1860s map of the region (*Atlas to Accompany the Official Records of the Union and Confederate Armies 1861-1865*) documented the bluffs along the north rim of the Ohio River between Metroplis and Napoleon as a "Ridge of Dry Barrens"—suggesting that the area was of marginal quality for farming during the early years of settlement. This map clearly depicted Hillerman's Landing. This same map noted a similar road network as the earlier maps with the addition of a road branching off the Ohio River road just west of Hillerman Landing and heading towards Jonesborough. At the approximate location of earlier Wilkinsonville was located the community of Napoleon (Davis et al. 1978:Plate CXIII) (Figure 11).

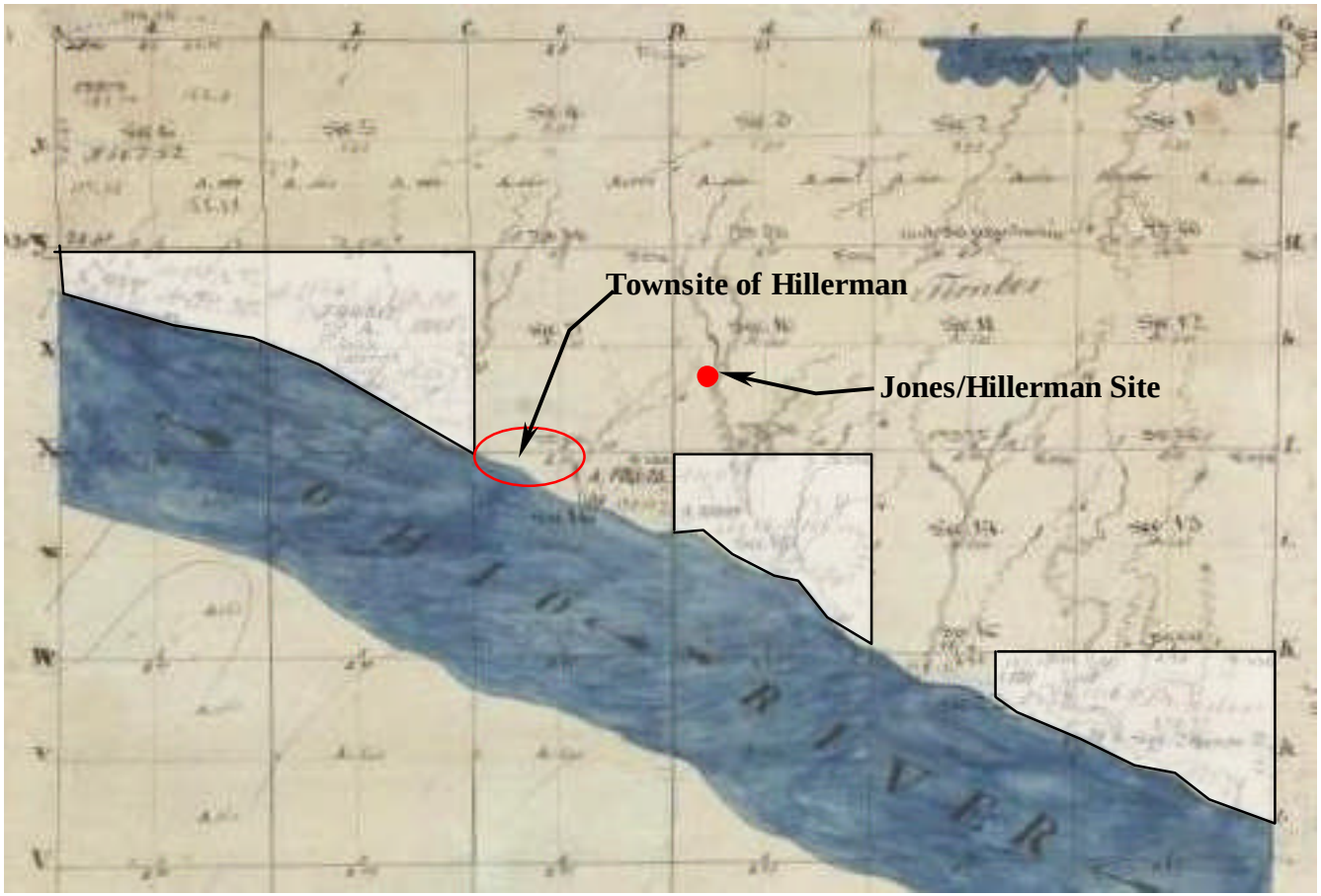


Figure 7. Location of the townsite of Hillerman and the Jones/Hillerman Site (11Mx306) in relationship to the lands identified on the U.S. General Land Office survey plats as "AP" lands (shaded in gray).

Figure 8. View of the southern tip of Illinois, as depicted on John Melish's 1819 *Map of Illinois.* At this time, the Jones/Hillerman Site was located in Johnson County, and in close proximity to a roadway running along the north rim of the Ohio River valley. The approximate location of the site is circled in red.

Figure 9. View of the southern tip of Illinois, as depicted on David Burr's 1834 *[Map of] Illinois.* The approximate location of the site is circled in red.

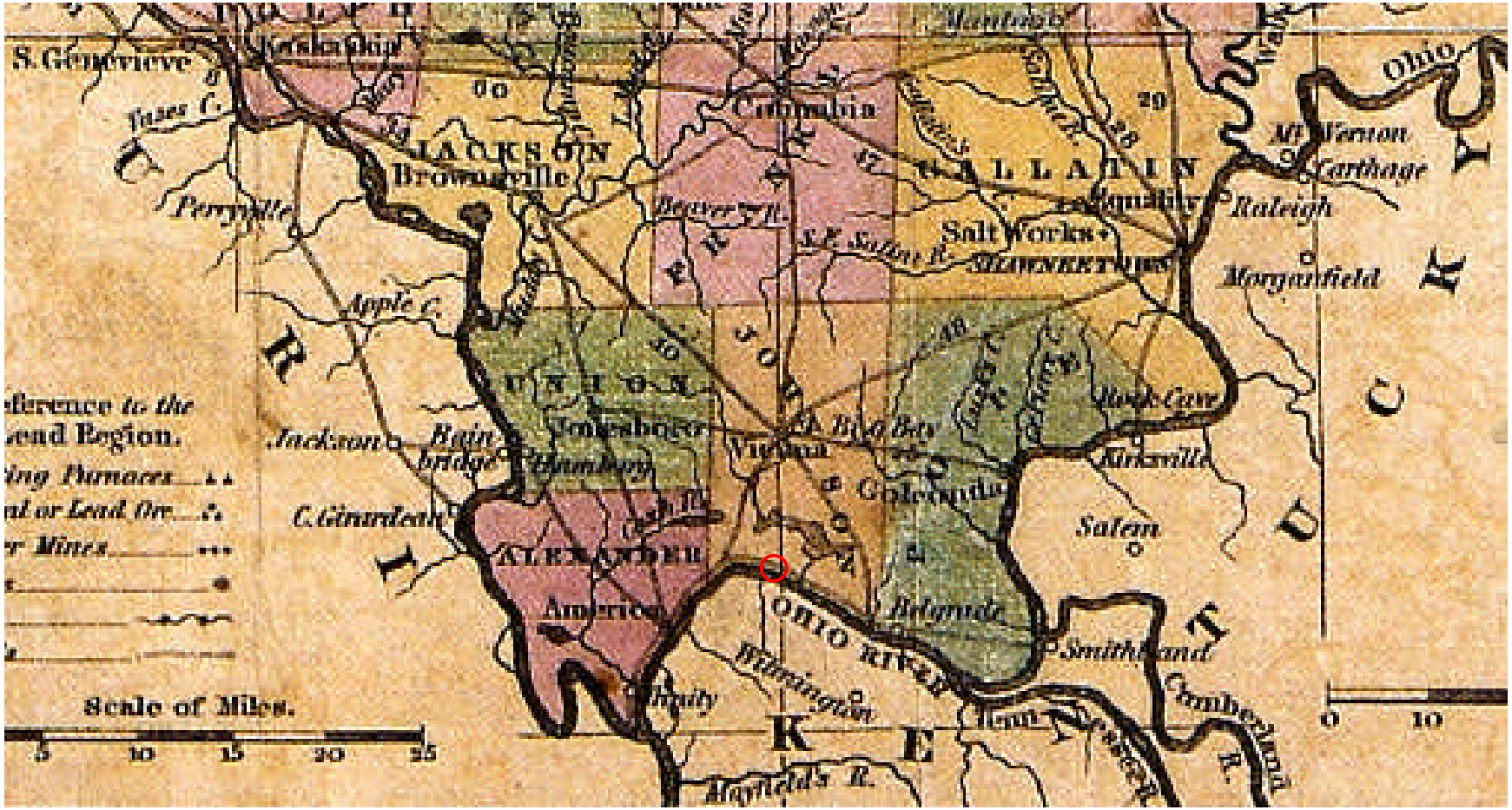


Figure 10. Note the development of Vienna as an upland hub within the far southern tier of Illinois counties by this date (Tanner 1830).

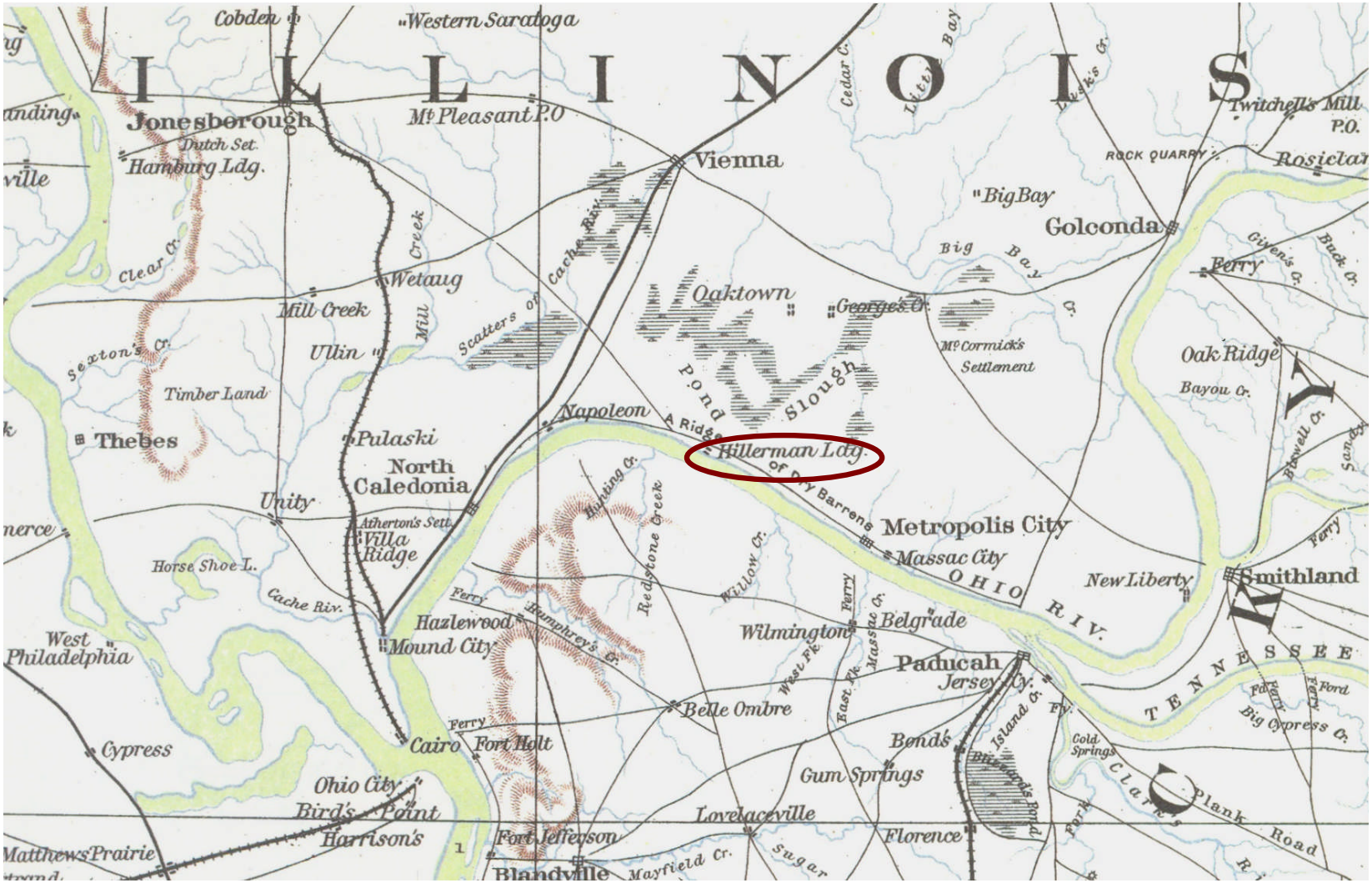


Figure 11. Detail of a map drawn up as part of the *Atlas to Accompany the Official Records of the Union and Confederate Armies 1861-1865*, showing the location of Hillerman Landing in relationship to surrounding river systems and towns. Hillerman apparently still served as a steamboat landing at this date, even though the Ohio has encroached upon it (David et al. 1978:Plate CXIII).

Site-Specific History

The Jones/Hillerman Site (11Mx306) is located on the NW¼, SW¼, Section 10 of Township 15 South, Range 3 East (Hillerman Township). It is situated approximately nine miles downriver from Fort Massac (Metropolis), and 9 miles upriver from Wilkinsonville. This 40-acre tract was not purchased from the United States until December 15, 1838, at which time it was purchased by a Jesse Jones (Illinois State Archives). At the time Jesse Jones purchased the NW¼, SW¼, Section 10, Massac County had not yet been organized, and the western half of the present county was attached to Johnson County. Deed and Government Land Office records report Jones as a resident of Johnson County in 1838, and he was still living there at least into 1841. Unfortunately, a search of the 1840 federal census did not find a listing for Jesse Jones in Johnson County, Illinois, so we know very little about his personal history. However, he is known to have purchased another 40-acre tract in the immediate vicinity of the Jones/Hillerman Site at a slightly earlier date. This was the SW¼, SE¼ of Section 9, which he bought from the United States on June 16, 1836, paying the standard government price of $1.25 per acre, or $50 total (Illinois State Archives) (Figure 12).

On February 27, 1841, Jesse Jones and his wife Margaret sold their 40-acres on the NW¼, SW¼ of Section 10 to Lorenzo D. Hillerman, William Parker, and Thomas Irwin for $250. One week later (March 6), Jones also sold the SW¼, SE¼ of Section 9 to these same men for $250. The deeds for these transactions describe Hillerman, Parker, and Irwin as "Merchants and traders trading and dealing under the Stile [sic] and firm of Hillerman Parker & Co. of the town of Hillerman" (Johnson County Deed Record B:192-4). The town of Hillerman was located less than one-mile southeast of the Jones/Hillerman Site and had been platted out by Lorenzo Hillerman and his business associates the previous year, the plat having been recorded August 18, 1840. The town was situated on banks of the Ohio River in the northwest corner of fractional Section 16. This location offered a high, level ridge top lying between two deeply entrenched drainages. Rising above the Ohio River just east of town was a rocky promontory, which modern sources refer to as "Hillerman Point."

Outside of deed and some court records, the documentary investigation found very little information on the backgrounds of Lorenzo Hillerman, William Parker, and Thomas C. Irwin.[1] Parker apparently was the first of the three men to invest in real estate in the Hillerman area. Government Land Office records show that he acquired the NW¼, SW¼ and the SE¼, SW¼ of Section 9 in June 1836. Both tracts lay immediately north of the future town site. On May 4, 1837, he purchased Lot 1 of Section 16, which was a fractional section of land on account of it being crossed by the Ohio River. Lot 1 contained 72 acres, and it was upon this land that the town of Hillerman eventually would be platted in 1840. William Parker was a resident of Johnson County at the time he made these various land purchases (Illinois State Archives).

The plat for the Town of Hillerman officially was submitted to county authorities on August 18, 1840. The plat called for twenty-four city blocks with twelve lots each (210 lots total) and a town square at the center (Figure 13). There were five streets running in an east-

[1] All three men are conspicuously absent from the 1840 census for Johnson County, even though deed records suggest they were residing in Hillerman at the time. A search on Ancestry.com for Lorenzo Hillerman for the relevant period (1830-1860) found no listings for Lorenzo D. Hillerman anywhere in the United States.

westerly direction, beginning with Water Street along the river and continuing inland with Second, Third, Fourth, and Fifth Streets. The thoroughfares running north-south through town had a more patriotic flavor and included Jackson, Washington, and Jefferson Streets. The obligatory Main Street paralleled these three presidential streets and framed the west side of the public square (Massac County Plat Record: Folder 515). Although the town plat does not indicate any public roads leading to Hillerman, it is not unreasonable to speculate that Main Street continued north of the town, following the ridge separating the two drainages mentioned.

Although the town plat was submitted in the name of both Lorenzo Hillerman and William Parker, Hillerman's legal interest in the property was not confirmed until October 6, 1840, when Parker and his wife Martha sold him an equal and undivided half interest" in Lot 1 of Section 16 and the SE¼, SW¼ of Section 9 for $797.50. That same day, in a separate deed, Hillerman purchased the SW¼, SW¼ of Section 9 outright from Parker for $200 (Johnson County Deed Record B:148-149). The date at which Thomas C. Irwin became involved with Hillerman and Parker is unclear.

Hillerman, Parker, and Irwin no doubt hoped their town's strategic location in relation to the river systems in the surrounding region would attract settlers and investors. Sitting on the broad Ohio itself, Hillerman was located a mere twenty miles from the mouth of the Tennessee River (with the Cumberland River only a short distance farther on) and some thirty miles from the confluence of the Ohio and Mississippi. This was the era of the steamboat, and an enormous volume of trade from the upper and lower Mississippi, the Ohio Valley, and Central Tennessee passed by this one stretch of river. At the very minimum, Hillerman, Parker, and Company likely hoped that their town would develop into the principal port of entry for Johnson County. Vienna, the county seat, was located fourteen miles inland and, though one of the largest communities in the area, could claim only twenty-five to thirty households and three stores as late as 1837 (Chapman 1925:294). Hence, Hillerman had a realistic prospect for becoming a major town within the county.

The true extent of development in Hillerman is not well understood.[2] However, it is of note that deed records reference the firm of Hillerman, Parker and Company as trading from the town of Hillerman. These records also consistently note Hillerman, Parker, and Irwin as residents of the community. Another known resident was William Hurd, who purchased Lots 5 and 6 in Hillerman in 1842 and was described as a resident of the town in the deed (Johnson County Deed Record B:335). A post office at Hillerman was established on September 8, 1843 (Adams 1968:392).

Glenn Sneed in *Ghost Towns of Southern Illinois* (1977:127) provides the following description of the town:

> There was a large warehouse, wharf, large store and several other smaller businesses. Most of the stores and houses were made of brick. The river flowed

[2] The *History of Massac County* (Page 1900:64?) simply notes that "Hillerman was a village in 1835 named [by/for] L.D. Hillerman, a river man, who purchased it of William Parker, and the latter went to New Orleans. Hats were made there."

> toward the Illinois side and the river was deep here. Steamboats could land with ease. Farmers shipped their grain, chiefly wheat from Hillerman. Negro dockhands stacked the wheat in two bushel sacks and carried them aboard their shoulders.

Whatever the town's initial promise was and the hopes of its proprietors were, however, Hillerman faced a number a significant challenges right from the start. To begin with, the town was platted out in the wake of the Panic of 1837. This financial crisis had residual effects in parts of the Midwest for nearly a decade, and many towns platted during this period struggled mightily—if not failing outright—as credit and investment dried up. Furthermore, deed records from Johnson and Massac County suggest that Hillerman, Parker, and Company got itself into debt fairly early into its venture and was facing multiple law suits by 1842.

On March 29, 1841, Thomas C. Irwin sold out his interest in the firm and its jointly held property to Hillerman and Parker for $4,000. This sale involved four tracts of land, including the NW¼, SW¼ of Section 9,[3] as well as the "Wares & Merchandise belonging to the said firm of Hillerman Parker & Irwin." Thomas Irwin also conveyed his "interest and claims in and to the said firm or Books, notes and accts. belonging to the same" (Johnson County Deed Record B:195). He later sold a 20-acre parcel (the N½, SE¼, SE¼ of Section 9) to Hillerman and Parker for $25 on an unspecified day in September 1841 (Johnson County Deed Record B:245-6).

Its partnership now reduced, the mercantile firm continued doing business as "Hillerman and Parker" through the summer of 1841. On September 11, however, William Parker followed Thomas Irwin's lead and decided to sell his "equal and undivided half interest" in 268.4 acres of land held jointly with Hillerman to the latter for $3,000. These lands were spread between Sections 9, 10, and 16 of Township 15 South, Range 3 East and included the NW¼, SW¼ of Section 10, on which the Jones/Hillerman Site is located, and Lot 1 of Section 16, where the Town of Hillerman had been platted (Johnson County Deed Record B:243-5).[4] It is of note that this same month (September 1841) Parker purchased Lots 43, 44, and 45 in the Town of Hillerman from Lorenzo and Francis Hillerman for $300. Both parties to this transaction are referenced as residents of Hillerman in the deed (Johnson County Deed Record B:240). William Parker apparently remained in the area for some time. He is listed in the 1850 census of Massac County as a cabinet maker (United States Bureau of the Census 1850b:232).

Subsequent deed records present a picture of Lorenzo Hillerman attempting to keep afloat financially by mortgaging his various properties in Massac (then Johnson) County. On November 27, 1841, for instance, he mortgaged 154 acres of land he owned in Sections 14 and 23 of Township 15 South, Range 3 East to a merchant from Pittsburgh named William Miller. This mortgage was for the nominal sum of $1 and was intended as collateral for securing

[3] The other tracts conveyed in this transaction were: Lot of Section 16; the SW¼, SE¼ of Section 9; and the E½, E¼, SE¼ of Section 9.

[4] The 268.4 acres of land conveyed in this transaction were apportioned as follows: Lots 1 and 2 of Section 16 (128.42 acres); SE¼, SW¼ of Section 9 (40 acres); SW¼, SE¼ of Section 9 (40 acres); N½, SE¼, SE¼ of Section 9 (20 acres); the NW¼, SW¼ of Section of 9 (40 acres); and the NW¼, SW¼ of Section 10 (40 acres) Johnson County Deed Record B:243-5).

payment of a preexisting debt owned by Hillerman to Miller. Hillerman had signed "several promissory notes amounting to $1,383.65" in Pittsburgh on November 7, 1840, with the condition that the money was to be repaid in six months. He had failed to do so, and an additional $46.15 in interests and costs had been added to the initial debt by the time the mortgage was arranged. The terms of the mortgage called for Hillerman to pay Miller $1,429.80 within one year, at 6% interest, or else forfeit his property. There is no evidence of the mortgage having been released, which suggests that the debt was never repaid (Johnson County Deed Record B:259-60).

On March 24, 1842, Lorenzo Hillerman took out a $500 mortgage on Lot 4 of Section 16 in Township 15 South, Range 3 East with Edmund Gage of Cincinnati, Ohio.[5] Hillerman agreed to repay the $500 within two years. As with the earlier agreement with Miller, however, there is no evidence that this debt was ever satisfied (Johnson County Deed Record B:303-4).

Lorenzo Hillerman had additional debts with other parties in Cincinnati, which he also failed to pay. This ultimately resulted in his Massac County lands being sold at public auction. The impetus for this action was a series of suits filed by Brockholst Mathewson, Amasa Sprague, William Sprague, and Phillip Tillinghart—all of Cincinnati—against both Hillerman and William Parker in 1842. During the May 1842 term of the Johnson County Court, Mathewson and his associates won a judgment for $476.31. Later that year, during the November court term, these men won another judgment against Hillerman and Parker for the amount of $1,785.07. Neither of these judgments was addressed by the defendants apparently, and in May and July of 1845 separate orders of execution were issued calling for the sale of real estate owned by Hillerman and Parker. By this time, the case had been transferred to the circuit court of Massac County, as Massac had separated from Johnson two years before. The order of execution was carried out by the Sheriff of Massac County, John Read, who "struck off and sold" Hillerman and Parker's lands at auction to the highest bidder. Brockhost Mathewson ended up buying all of the property sold at the sheriff's sale to settle the two judgments. This property was all located in Township 15 South, Range 3 East and included 172 lots in the Town of Hillerman (Lots 1-9, 11-22, 26-160, 170-185) and approximately 860 acres of additional land in Sections 9, 10, 14, 16, and 23.[6] Title to these various properties was conveyed by Sheriff Read to Mathewson in five separate deeds (Massac County Deed Record A:320-5).

The NW¼, SW¼ of Section 10, on which the Jones/Hillerman Site is located, apparently was not included with those lands conveyed to Brockholst Mathewson in 1847. This tract, however, was included in a separate sale by Sheriff John Read to Carter Curtiss and William G. Alexander in 1850. This sale involved multiple tracts owned by Lorenzo Hillerman and was intended to recover a judgment of $3,845 against him dating from May 1842. The judgment in

[5] The 1850 census lists Edmund Gage as a resident of Cincinnati's 8th Ward and notes him as a 47-year-old Massachusetts native who owned $30,000 worth of real estate. Although this census lists Gage's occupation as "none," he perhaps was a self-employed financier at this time. In the 1840 census, his occupation is classified under "Manufacturers and Trades" (United States Bureau of the Census 1840:300, 1850a:486).

[6] The specific tracts involved were: the NE¼, SE¼ of Section 1 (40 acres); the SW¼, SE¼, the SE¼, SW¼, the NW¼, SW¼, and SW¼, SW¼ of Section 9 (160 acres total); SE¼ of Section 10 (160 acres); the E½, SE¼ and W½, SW¼ of Section 14 (160 acres total); Lots 1, 2, and 4 of Section 16 (192.3 acres); and the East and West Parts of Section 23 (147 acres).

question had been issued by the circuit court of Alexander County, Illinois. Title to the NW¼, SW¼ of Section 10 and the other properties were conveyed to Curtiss and Alexander through a single instrument filed on December 31, 1850. Curtiss and Alexander are described as "assignees of Chadwick and Leavitt" in the deed (Massac County Deed Record B:506).

Oddly, most of the tracts conveyed by Sheriff Read to Curtiss and Alexander in 1850 were the same as those he had sold to Brockhost Mathewson three years earlier. This discrepancy is not understood. What is known, however, is that the earliest tax records available for Massac County, which date to 1855, report Brockholst Mathewson as the owner of the NW¼, SW¼ of Section 10. The 40-acre tract had an assessed value of $200 in 1855, which appears to have been the base value for unimproved rural acreage (Massac County Assessor's Book 1855). By 1859, the assessment on the property had risen to $320, but this increase in value since 1855 seems to reflect a general reassessment as opposed to improvements on the property. In 1863, the assessed value had dropped down again to $200. The 1869 Assessor's Book actually provides separate listings for improved and unimproved acreage, and the NW¼, SW¼ of Section 10 is reported as being entirely unimproved. At this date, the property was still assessed in Brockholst Mathewson's name. By 1875, John L. Todd was listed as the owner of the NW¼, SW¼ of Section 10, which still was reported as entirely unimproved lands (Massac County Assessor's Book 1869, 1863, 1869, 1875).

The town of Hillerman appears to have gone into sharp decline in the 1850s. The post office, which had been established in 1843, was discontinued on June 21, 1851 (Adams 1968:392). Sneed (1977:127) suggests that the encroachment of the Ohio River proved a fatal blow to the town. The wharf and warehouse apparently had been washed away by the late 1850s, and "by 1875 the brick stores and houses were swept away by the mighty stream." The map of Massac County included within the 1876 *Atlas for the State of Illinois* makes note of the "Former Site of Hillerman" (Figure 14). This same map illustrates a series of steamboat landings to either side of Hillerman, including Owens Landing to the west and Fletcher's Landing to the east (Warner and Beers 1876). A cemetery associated with the abandoned town is located on a knoll overlooking the eastern slopes of the drainages bordering the site. Jones (1916:143) in his *The Ohio River: Charts, Drawings, and Description of Features affecting Navigation* makes reference to Hillerman Creek, Hillerman Landing and Hillerman Rocks.

A new Hillerman Post Office was established on February 11, 1890, but this was not located at the old town site. Rather, it was situated in a rural hamlet clustered around William Hewie's property, about one mile north of the river (Adams 1968:392; Sneed 1977:127). Today, Hillerman is a small unincorporated cross-roads hamlet located in Section 4 approximately one mile to the northwest of the existing project area (Figure 3). The Jones/Hillerman Site does not appear on the 1938 USDA aerial photograph (Figure 5). Today, the townsite of Hillerman is overgrown, and except for the presence of a cemetery and an extremely eroded road leading to the river, little sign of the once present community is present (see Figures 15-16).

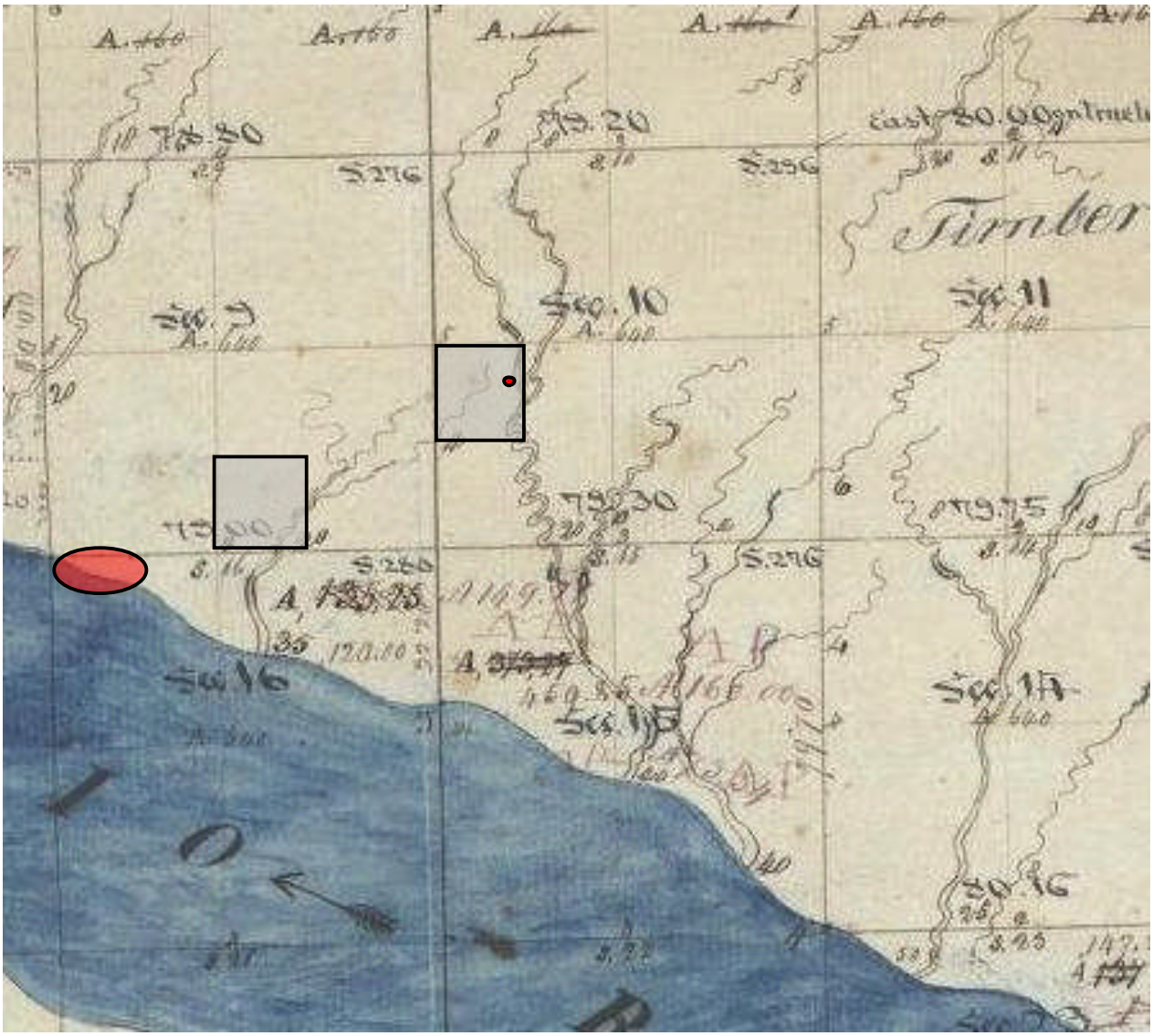


Figure 12. Partial view of the 1807 U.S. General Land Office survey plat for Township 15 South, Range 3 East, Massac County, Illinois (USGLO 1807). The two parcels of land purchased by Jesse Jones are shaded in gray, and the location of the future townsite of Hillerman is shaded in red. North is to the top of the page. Note the presence of the "AP" designations on the adjacent lands to the south, but not on the project area land.

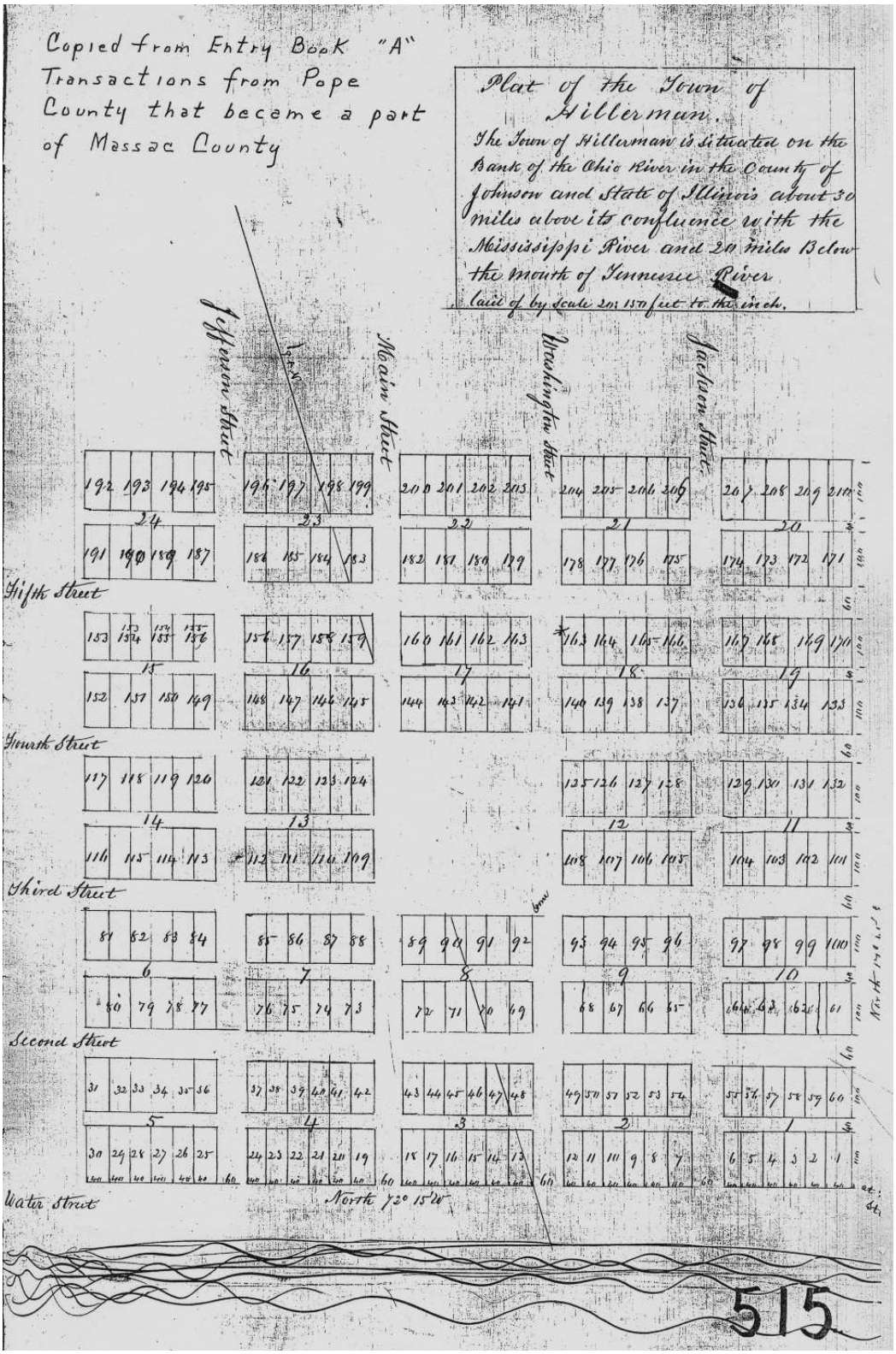


Figure 13. Plat of the Town of Hillerman, located on Lot 1 of Section 16 in Township 15 South, Range 3 East (Massac County Plat Record: Sheet 515).

Figure 14. Location of the CCB Management Facility, Electric Energy, Inc., Joppa Generating Station, Massac County, Illinois) as illustrated on the 1876 *Atlas of the State of Illinois* (Warner and Beers 1876). The project area is outlined in red. North is to the top of the page. Note the location of the *former* site of Hillerman.

Figure 15. Road leading out of the bottom from Hillerman Landing into the uplands.

Figure 16. Two contemporary views of the Hillerman Landing along the Ohio River.

Results of the Archaeological Investigations

The Phase I Survey

The Jones/Hillerman Site was discovered during the Phase I archaeological survey of the proposed CCB Management Facility (Mansberger 2008). During that survey, nine archaeological sites were found within the project area (Mansberger 2008). Of these sites, only one (Site 1, 11Mx306), which has since been identified as the Jones/Hillerman Site, was recommended for Phase II testing. At the time of the Phase I survey, Site 11Mx306 was noted as a small historic site.

> [The site] which represents the remains of a short term early to middle nineteenth century farmstead, is located along a ridge overlooking and to the west of the creek. A total of forty-one historic and one prehistoric artifacts were recovered from the surface of this site. The historic artifacts consisted predominately of ceramics, and included eighteen undecorated whiteware sherds, six transfer printed whiteware sherds, four painted whiteware sherds, one painted pearlware sherd, four edge decorated pearlware sherds, one edge decorated whiteware sherd, two undecorated porcelain sherds, and one redware sherd. Besides these ceramics, only one mussel shell fragment, and one black glass container sherd were recovered from the surface of the site. This site probably represents a short-term mid-nineteenth century farmstead. This corresponds well with the initial land purchase date of December 1838 by a Jesse Jones, and suggests that this site may represent the initial settlement of this tract of land by Jones (Mansberger 2008).

Based on the limited information at hand at that time, it was suggested that this site probably represented a short-term mid-nineteenth century farmstead. Upon completion of the Phase I survey, Phase II testing was recommended.

The Phase II Testing

The Phase II archaeological investigations consisted of a controlled surface collection followed by the excavation of nine backhoe trenches. Prior to conducting the Phase II survey, the field was disked and subsequently rained upon. At the time of the controlled surface collection, the surface visibility at the site was excellent (90-100%) and well washed (Figure 17). The field was subsequently walked multiple times at a closely spaced interval (1m) with all surface artifacts identified being flagged, and their location shot in with a total station. A total of only 72 artifacts were located on the surface at this time (seven of which were prehistoric items). The surface artifact density, although relatively light in character, consisted of items consistent with those collected earlier. Figure 18 illustrates the location of the surface artifacts. Based on the distribution of artifacts, at its greatest extent, the site measured approximately 50m north/south by 30m east/west. At its greatest extent, the total area of the surface distribution of artifacts (i.e. the site limits as defined by the surface scatter) comprised a polygon consisting of approximately 650 square meters in size. A more realistic representation of the site size is

approximately 600 square meters (6,450 square feet). As such, the artifact density on the surface of this site was a very low 0.11 artifacts/square meter.

Upon completion of the controlled surface collection, a large backhoe (with 6' wide bucket) was used to excavate nine test trenches across the site (Figures 19 and 21). A total of approximately 216 linear meters of test trench was excavated, as well as several large areas between the test trenches (to expose features). To fully expose the features located within the test trenches, several of the backhoe trenches were expanded creating a relatively large block excavation at the center of the site. In all, approximately 460 square meters was opened for inspection, resulting in the identification of a cluster of seven subsurface features. Figure 20 illustrates the location of the test trenches and features associated with the Phase II testing of this site. As such, approximately 71% of the site was opened up and inspected for features at this time; that area of the site not opened up (comprising the remaining 29% of the site) consists of peripheral areas around the edge of the site. Except for Feature 6, all features were partially excavated during the Phase II testing to assess the depth and artifact density of each feature. Artifacts from each feature were inventoried and have been presented in the attached appendices.

Figure 17. Three views of the Controlled Surface Collection being conducted at the Jones/Hillerman Site (11Mx306).

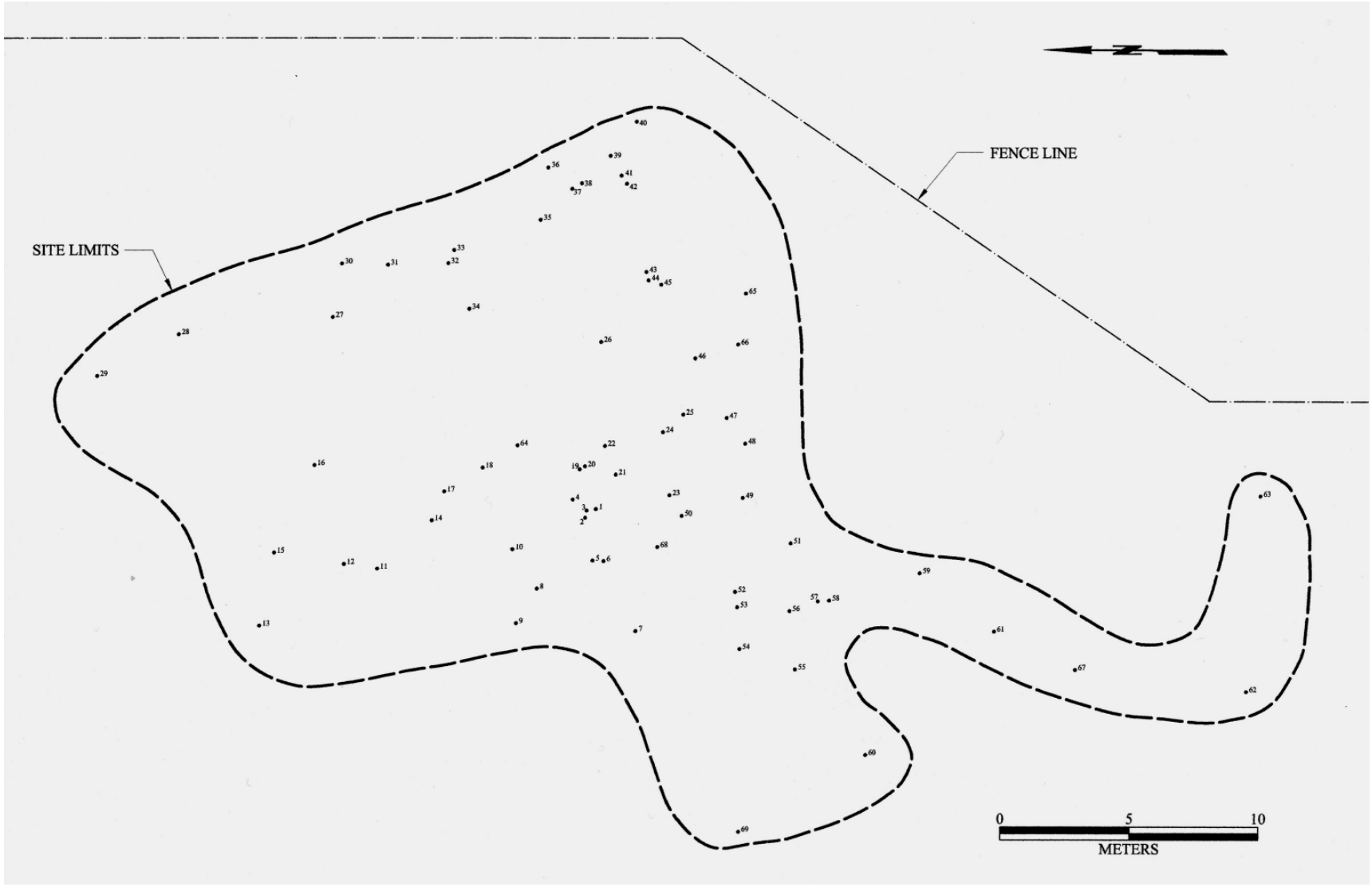


Figure 18. Jones/Hillerman Site (11Mx306) base map illustrating distribution of artifacts on the surface of the site.

Figure 19. Three views of the backhoe trenching being conducted at the Jones/Hillerman Site (11Mx306). The distance between backhoe trenches was very small, with the backdirt being placed within the previously excavated trench.

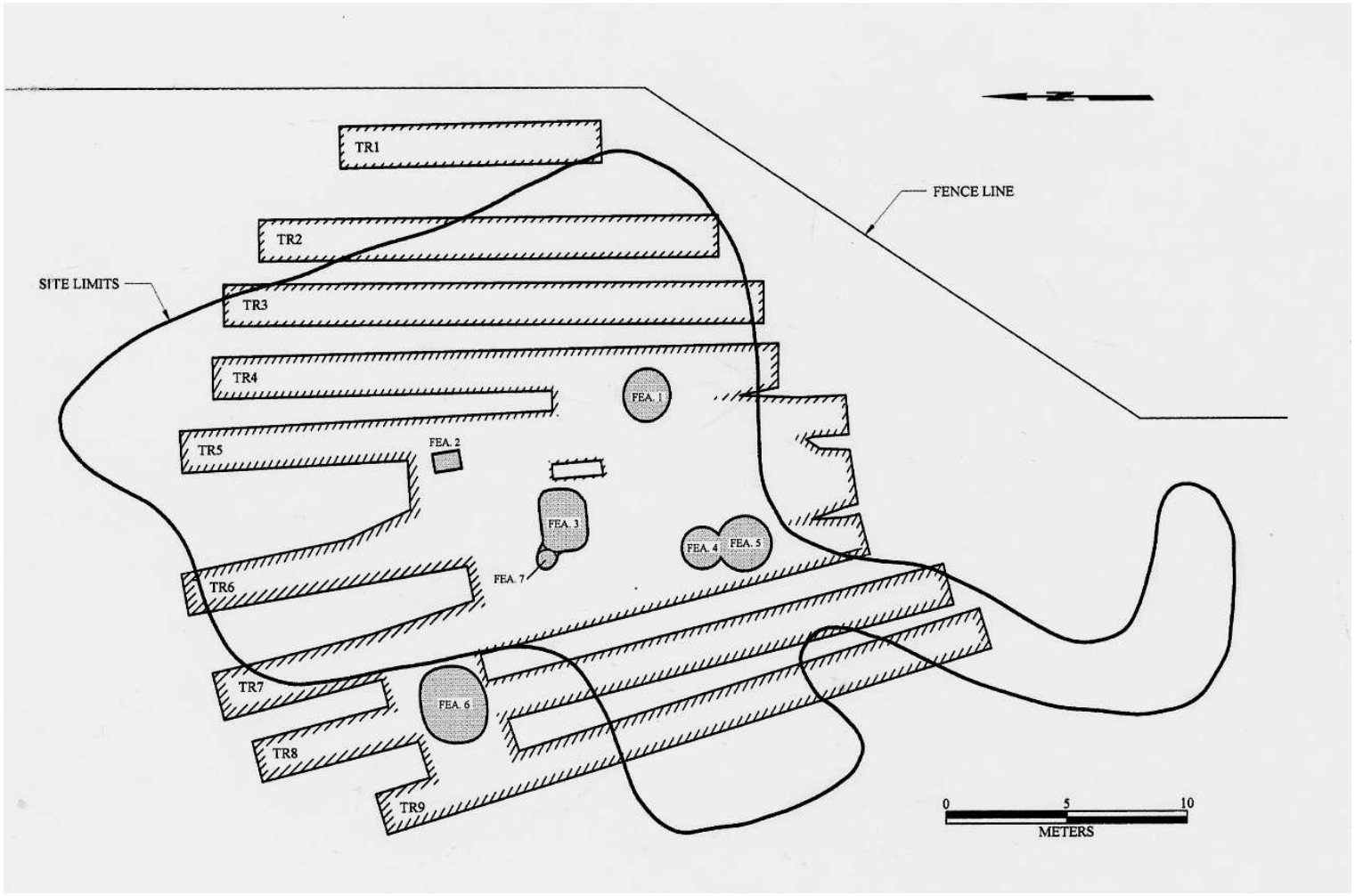


Figure 20. Jones/Hillerman Site (11Mx306) base map illustrating location of test trenches and features in relationship to the site boundaries.

Figure 21. Two views of the Jones/Hillerman Site (11Mx306), looking south at the test trenches. Feature 6 is visible in both pictures.

The Phase III Archaeological Mitigation

The Phase III archaeological investigations were conducted in November 2008. This work consisted of the removal of additional topsoil (in search of additional subsurface features), and the complete excavation of the exposed archaeological features. An additional approximate 130 linear meters of test trenches were excavated with a backhoe around the periphery of the site. Additionally, several of the intervening unexcavated areas between the trenches was opened up and inspected for subsurface features. This resulted in the near complete exposure of the site, and resulted in the identification of only one additional feature (Feature 8) (see Figures 22-23).

A total of eight features were identified at the Jones/Hillerman Site during the combined Phase II and III investigations. With the smaller features (Features 1, 2, 4, 5, 7, and 8), an initial half of each feature was excavated, profiles drawn and photographed, and then the second half of the feature was excavated. The larger Feature 3 was quarter sectioned, with two opposing quadrants being excavated first, followed by the recording of profile walls, and subsequent excavation of the remaining two quadrants. The large, deep Feature 6 was partially hand excavated in one quadrant, and then subsequently sectioned with a backhoe. Except for Feature 6, all feature fill was screened through ¼" hardware cloth. Additionally, a single flotation sample was taken from each feature.

Feature descriptions are presented below. Artifact provenience information and inventories are presented in the attached appendices. The artifacts recovered from the combined Phase II testing and Phase III mitigation were inventoried and are presented in Appendix II. Although some of the more interesting artifacts are discussed in the feature descriptions below, the artifacts are discussed collectively in a subsequent section of the report.

Feature 1 (Figures 24-25) was a shallow pit which was slightly oval in plan view. It measured approximately 1.98m north/south by 2.10m east/west. In section, the pit was a basin shaped, and extended, at its deepest, approximately 38cm below the scraped surface. The fill within this feature was a dark reddish brown silt loam with rather light charcoal and ash mottling. The fill was relatively uniform in texture and color. Several rather large (1-2" in size) pieces of burned soil and/or daub were present in the fill. Artifacts within this feature were relatively light, and consisted predominately of re-deposited midden materials. The one exception was the presence of a large fragment of an undecorated whiteware plate with an impressed makers mark ("DAVENPORT / GRANITE") and the year code representing 1840 (Figures 26-27). Another interesting artifact from the feature was a percussion cap from a firearm. The relative clean fill—in both terms of artifact density and soil mottling/inclusions—is in sharp contrast to the adjacent Features 3, 4, and 5. The original function of this feature is unknown.

Feature 2 (Figures 28-29) was a rectangular pit that measured approximately 90cm east/west by 1.05m north/south. The pit extended to a depth of approximately 24cm below the scraped surface. The pit had straight walls and a flat bottom. No evidence of a wood lining was noted during the excavations. Two fill episodes were noted within the pit. The upper fill was a dark colored silt loam with several whole and/or restorable artifacts (including a blue transfer

print saucer, an annular decorated waster bowl, a cow bell, and one end of a single-tree hook) (Figure 30). Other artifacts found in this pit include remnants of at least one shoe, and a deer antler rack which had had the antler tines broken off. The lower fill was a lighter colored soil without any artifacts. In general, artifact density in this pit was very low. Although the form of this feature suggests that it might represent a privy pit, no seeds or other organic matter was noted within the lower fill zone. Although initially suspected as representing the remains of a privy pit, subsequent analysis suggests that this feature (and the adjacent Feature 8) may represent small sub-floor cellars.

Feature 3 (Figures 31-33) was a large oval pit that measured approximately 2.0m (north/south) by 2.65m (east/west). The feature was located with the center of the small feature cluster. When initially identified, this pit appeared to have a small extension off its northwest "corner", but subsequent investigations indicated that the small extension represented a second smaller pit feature—which was subsequently identified as Feature 7. Although these two pits were abutting one another, they were superimposed one on the other. Portions of both the southeast and northwest quarters of Feature 3 were excavated. The excavations indicated that the large oval pit had a relatively flat—albeit irregular—base with concave sides. At its greatest depth, the base of the feature was approximately 38cm below the scraped surface. Four discrete fill zones were noted within the feature. Zone I was a mixed reddish gray brown silt topsoil and subsoil. Zone II was an organic rich, dark brown to black topsoil with heavy wood ash and charcoal concentrations. Both Zones I and II contained fragments of burned soil, daub, and/or very poorly fired brick fragments. Zone III was a clean yellow subsoil fill. Zone IV was similar to Zone II, except that it contained higher levels of wood ash. The artifacts appear to have been found throughout the feature fill. The artifacts from within this feature were all relatively small in size, and included predominately ceramics and bone. An occasional button, straight pin, and fragment of glass were also present. The artifacts are all of a domestic character and appear to represent kitchen/hearth cleanings. Except for a pelvic bone found on the very base of the feature, the majority of the bone from within this feature had been burned and/or calcined. Similarly, many of the artifacts from this feature exhibited evidence of having been burned. A painted piece of pottery (painted with an earth-tone palette typical of the 1810s and 1820s and impressed with the mark "ADAMS") was also found on the base of the feature. One of the more interesting artifacts recovered from the upper fill of this feature was an impressed wine bottle seal that reads "LEZUNE & DUMAS / BORDEAUX". Unlike Features 4 and 5 (which contained predominately ceramic items and very few small finds), this feature contained a variety of small finds (such as musket balls, jewelry, straight pins, and toys). Container glass and egg shell was also present, albeit in very small quantities. Although the original function of this large, shallow basin is unknown, it may have functioned in the same manner as nearby Features 1, 4, and 5—or have functioned as a sub-floor cellar (like nearby Features 2 and 8).

Features 4 and 5 (Figures 34-37) are two large circular pits abutting one another. Although at the scraped surface these two pits appeared to cut exhibit superpositioning (with one cutting into the other), subsequent excavations indicate that these features were positioned side by side and did not cut into each other. Feature 4, the smaller pit, was slightly oval in plan measuring 1.50m by 1.60m in size. Feature 5 was a similarly shaped oval measuring approximately 2.0m by 2.2m in size. Both features were shallow basins. Feature 4 extended only 18cm below the scraped surface. Feature 5, at its greatest depth, was only 30 cm deep.

Both features contained a single episode of fill that was similar in color, texture and artifact content. The fill within these two features was a dark reddish brown silt loam rich in charcoal and wood ash. Artifacts included predominately ceramics, calcined bone, unburned bone, eggshell and minor amounts of burned softmud brick, burned soil, or daub fragments. The fill from these two features appears to be relatively contemporaneous and represents domestic debris, particularly kitchen hearth cleanings. Feature 4—the smaller feature—contained much less ash, charcoal, and artifacts than the adjacent Feature 5. Similarly, Feature 5—due to the higher charcoal content—was slightly darker in color. It also contained considerably more burned soil or daub fragments than the adjacent Feature 4. A small, tabular fragment of worked sandstone, initially thought to represent a fragment of a hearthstone, was found in Feature 5. Upon closer examination, it appears that this fragment of sandstone probably represents a sharpening or honing stone. Feature 5 also had a greater diversity of small finds—including an iron needle, antler handled cutlery, and multiple bone buttons. The artifacts and related non-artifactual material (i.e. ash, charcoal, and burned soil, daub, or soft brick fragments), which was concentrated near the base of the features, probably represent the dumping of kitchen slop buckets (which included hearth cleaning material) into these pits upon their initial abandonment. Artifacts in both pits were found concentrated in clusters, typical of slop bucket deposition. One such cluster of artifacts, potentially representing the remains of the dumping of a single slop bucket—contained a very different assemblage of artifacts (horse shoe, stirrup, harness buckle, and large fork) that appears to represent male-oriented activities. The original function of these two basin-shaped pits is unknown. Additionally, two prehistoric pottery sherds were recovered from this pit.

Feature 6 (Figures 38-40) was identified during the Phase II testing as a large, rectangular pit (with rounded corners) that measured approximately 10' by 10' in size. At the scraped surface, this pit contained few artifacts and the soil was very light in color and devoid of cultural mottling—in sharp contrast to all the other features at the site. Although this pit was not excavated during the Phase II testing, coring at this time suggested that it was very shallow (approximately 6-8" in depth). Unlike the other features at this site, several large fragments of stone were present on the scraped surface of this pit. At that time—due to its relatively square shape and presence of stone—it was believed that the pit may represent the remains of a shallow cellar. By the time the field crew had returned to the site to conduct the Phase III mitigation, the surface of the feature had been heavily tromped on by cattle or deer, which had thoroughly destroyed the upper 5-10cm of the feature. At that time, the field crew redefined the feature by shovel scraping through the disturbed upper fill. Upon completing this task, the feature was redefined at this lower level as a large diameter circular pit that measured approximately 10' in diameter.

At the scraped surface, two distinctively different fills were identified. The majority of the fill, located within the central core of the pit, was a dark-colored silt loam. Encircling this dark core, was a thin band of very light colored fill that was the same color as the surrounding subsoil. Initially, the southwest quarter of this pit was hand excavated to a depth of 1.0m below the scraped surface. This hand excavated portion of the pit documented that the dark fills noted on the surface were not very thick (less than 20cm), and that the artifact density within this feature was very low. The only artifacts recovered during this hand excavation was a couple of machine cut nails, and a couple small fragments of whiteware. The sidewalls of the pit remained

circular in plan, but sloped inward rather quickly. The inward sloping walls appeared to be regular, and not slumped. The lower fill was light colored, uniform in texture and mottling, and devoid of artifacts. Coring at this time indicated that the feature had some depth to it, and the hand excavations were terminated. With the use of a backhoe (with smooth bucket), the west half of the pit was excavated to its base of the feature. The profile wall indicated that this pit extended to a depth of 6'5" (1.95m) below the scraped surface. The side walls were basically straight and sloped inward at a nearly 45-degree angle. The north wall exhibited a slight bit of irregularity, potentially from slumping. The base was flat, and circular in plan with an approximate 2'8" (0.81m) diameter. Although the original function of this feature is unknown, several potential interpretations are postulated. Features of this character are often referred to in the literature as "unlined cisterns." As will be discussed in the subsequent section of the report, the concept of an "unlined" cistern is technologically impractical (if not impossible). More likely interpretations are that this feature represents the remains of a shallow well (with its lining having been removed), or a deep storage pit. The character of the inward sloping walls, and the lack of a central shaft fill strongly suggests that this feature represents another, albeit considerably deeper, storage pit.

Feature 7 (Figures 31-33, 41) was initially identified as a small extension off the northwest "corner" of Feature 3. Subsequent excavations indicated that this extension actually represented a discrete pit dug alongside of—but not intruding into—the adjacent Feature 3. Feature 7 was circular in plan (2'8"/0.81m in diameter) and basin-shaped in section. At its greatest depth, the pit extended approximately 11" (0.28m) below the scraped surface. Although the fill within Feature 7 was similar in color and texture to the upper fill (Zone I) in the adjacent Feature 3, the artifact content between the two features was slightly different. Unlike Feature 3, Feature 7 contained low amounts of wood ash and charcoal, and comparatively speaking, relatively high amounts of burned soft mud brick/daub fragments. The lower charcoal content of Feature 7 gave it a slightly lighter color than the adjacent Feature 3. Similarly, artifacts in Feature 7 were not burned, as with the adjacent Feature 3. Artifacts recovered from this feature also appear to be different than those recovered from the adjacent Feature 3, and include a slightly different suite of ceramics (more flue blue decorated tablewares) as well as more buttons and straight pins. The original function of this pit is unknown. It's smaller size raises questions as to whether it had a similar function as nearby Features 1, 3, 4, and 5.

Feature 8 (Figures 29 and 42) was the only feature discovered during the subsequent removal of plowzone associated with the Phase III mitigation. This feature was situated within two meters of Feature 2, and morphologically most resembled Feature 2 than any other feature at this site. Feature 8 was roughly rectangular in plan, measuring approximately 2'0" (0.61m) wide by 2'5" (0.74m) long. One end of the feature had relatively square corners—albeit slightly rounded—whereas the other end was considerably rounded. This feature was shallow, with slightly concave sides and a flat bottom. It extended to a depth of only 6" (0.15m) below the scraped surface. Fill within the pit was a mottled, homogeneously mixed topsoil and subsoil that was very clean. It lacked both the hearth scrapings (ash, charcoal, burned soil) and artifacts (small secondary items) common among the other features. Additionally, it lacked the primary artifacts found in Feature 2. Although the function of Feature 8 is unknown, it most resembled Feature 2 in morphology. It is suspected that Features 2 and 8 represent small subfloor storage pits (or cellars) located beneath a dwelling.

Figure 22. Feature excavation in progress at the Jones/Hillerman Site. By this time, the site had grown over in shoulder-high weeds.

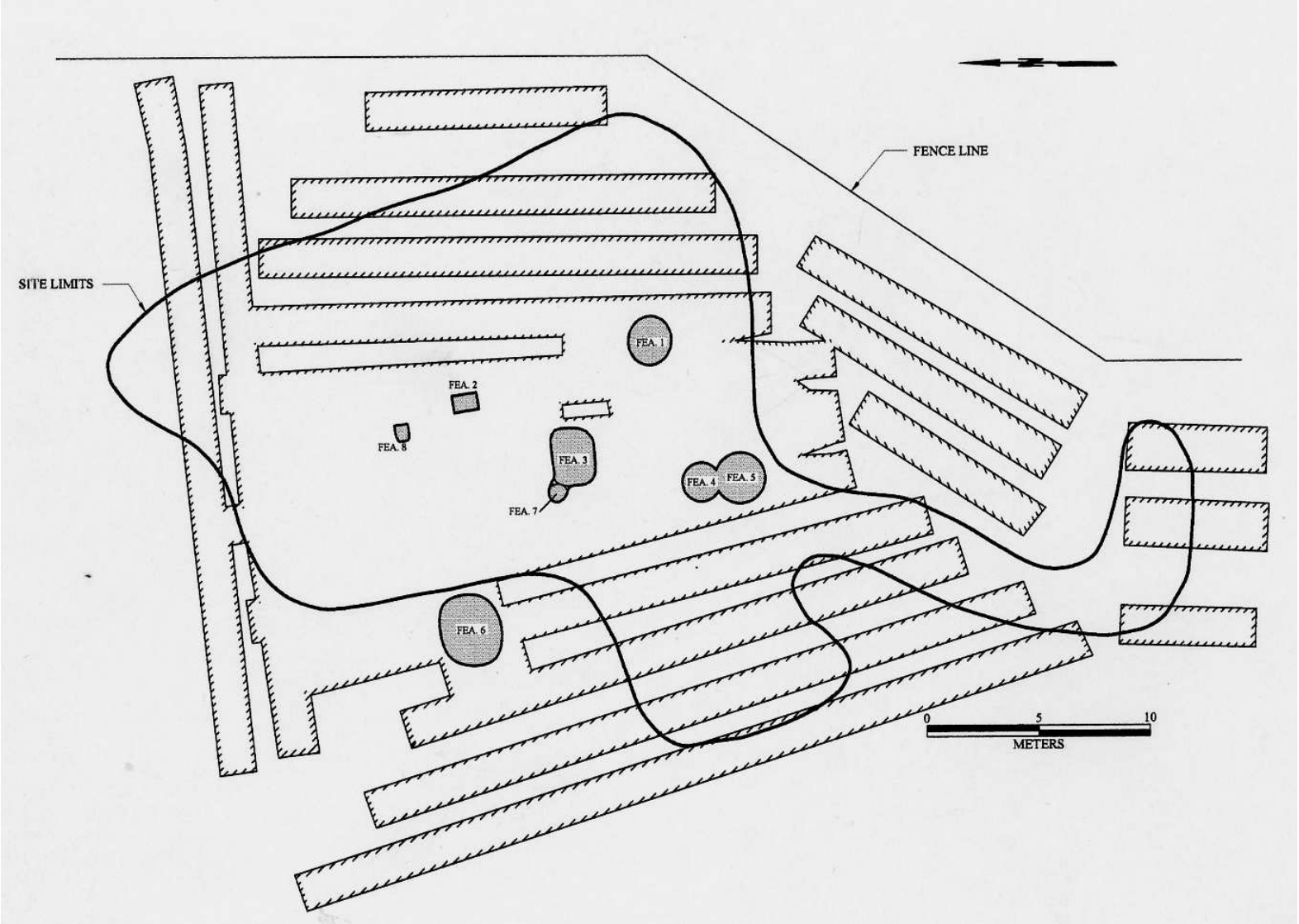


Figure 23. Jones/Hillerman Site (11Mx306) base map illustrating location of the area of the site stripped of plowzone during the Phase III mitigation, and features exposed during the investigations.

Figure 24. Views of Feature 1 prior to excavation (top) and after excavation of the east half (bottom) (Jones/Hillerman Site, 11Mx306).

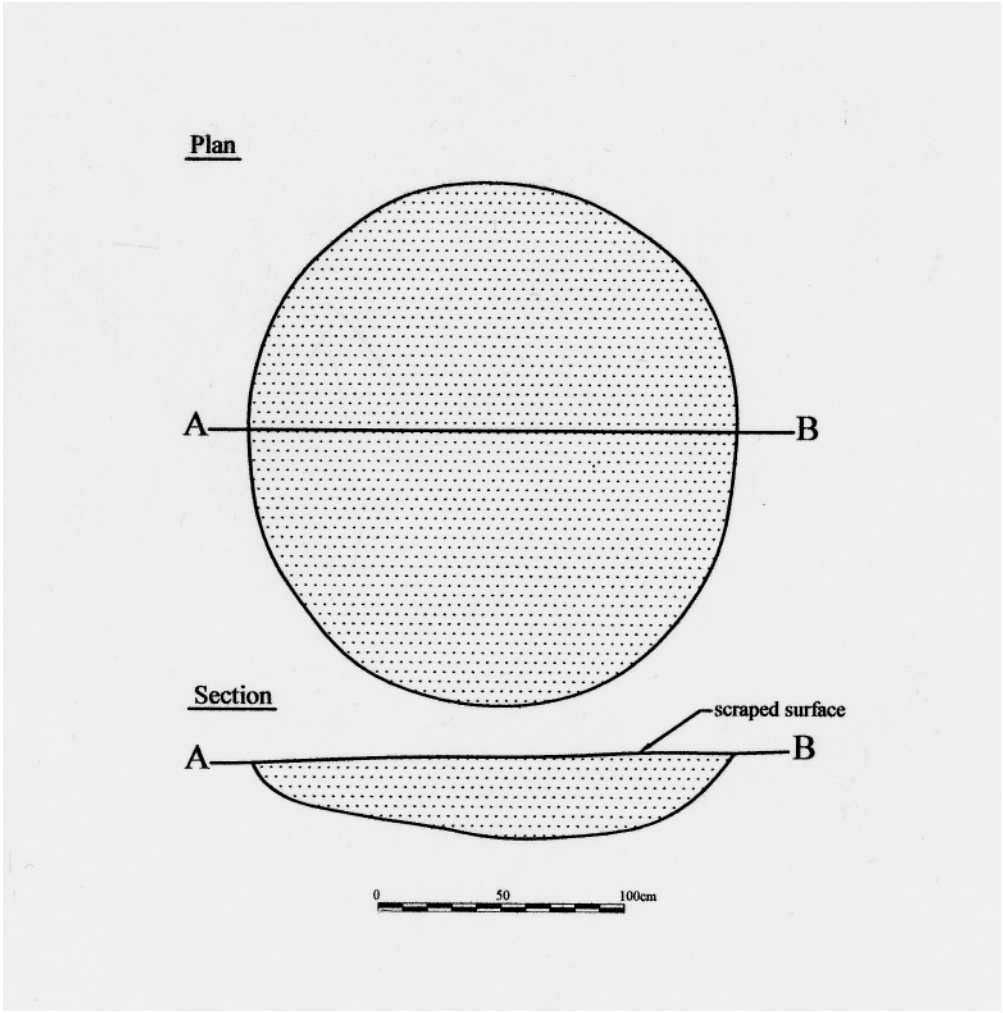


Figure 25. Plan and cross section views of Feature 1 (Jones/Hillerman Site, 11Mx306).

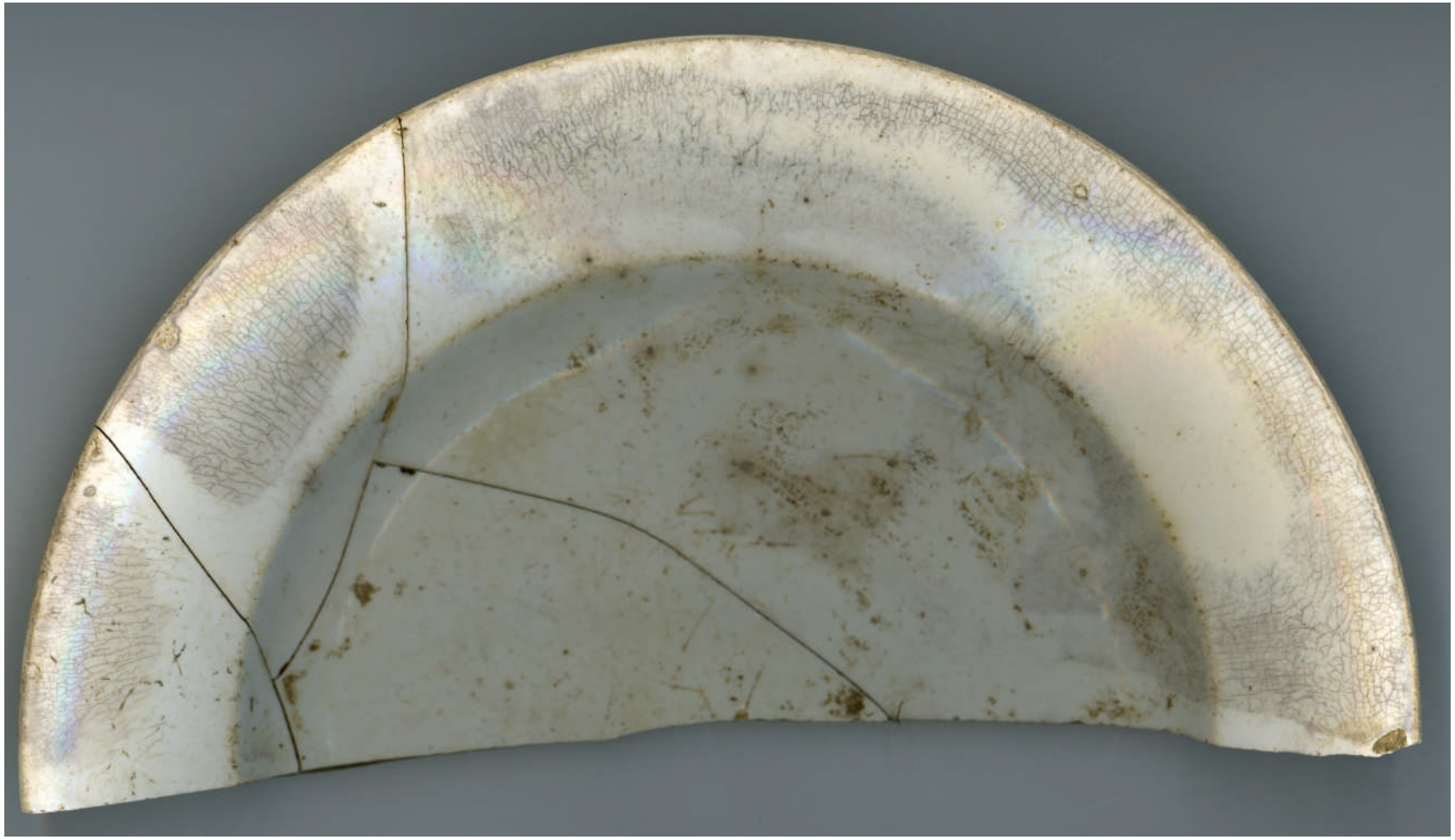
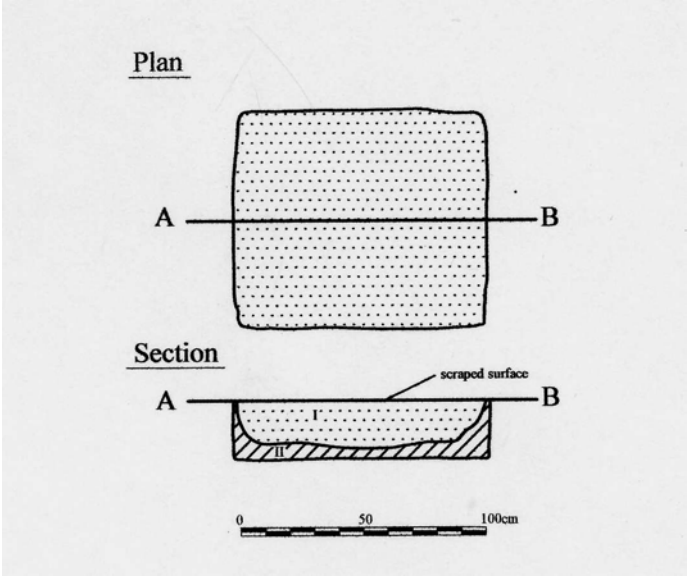


Figure 26. Few artifacts were recovered from Feature 1. This unassuming, undecorated small plate was one of the few primary artifacts recovered from this feature. This plate, illustrated here at actual size, had an impressed Davenport mark indicating a manufacturing date of 1840.

Figure 27. Impressed "DAVENPORT / GRANITE" mark from previously illustrated vessel in Figure 26. This mark incorporates an anchor with the numbers "4" and "0"—which reference the manufacturing date of 1840.

Figure 28. Two views of Feature 2 prior to excavation (top) and after excavation of the east half (bottom) (Jones/Hillerman Site, 11Mx306). Although no fecal material was obvious within the base of this feature, its size, shape and location suggest that it probably functioned as a privy pit.



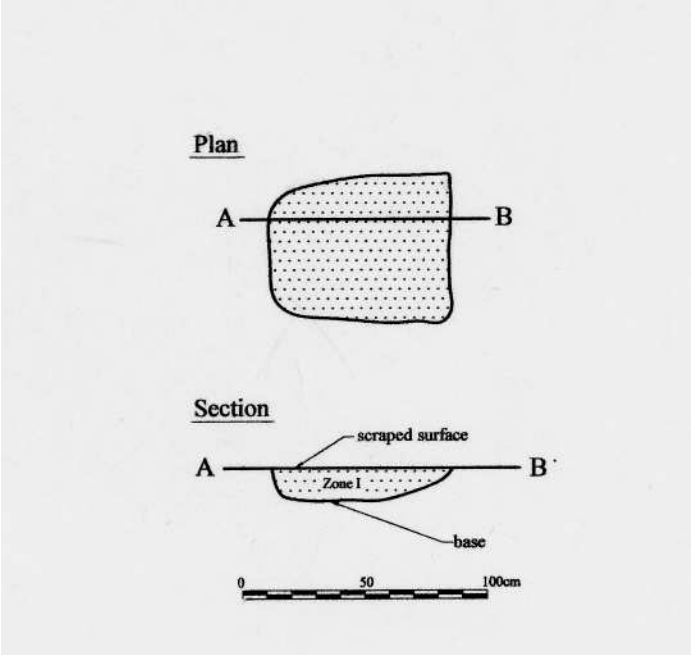


Figure 29. Plan and cross section views of Feature 2 (top), and Feature 8 (bottom) (Jones/Hillerman Site, 11Mx306).

Figure 30. Unlike the surrounding features—which contained predominately fragmentary, small artifacts originating from kitchen refuse—Feature 2 contained predominately whole and/or reconstructable artifacts associated with a primary context. Items recovered, although few in number, were relatively whole and included an annular decorated waster bowl, a blue printed saucer, an ax, a cowbell, and a singletree hook.

Figure 31. Multiple views of Features 3 and 7 prior to (top) and during (bottom two) excavation.

Figure 32. Two views of Feature 3 during excavation. Top, looking west/northwest; bottom, looking north.

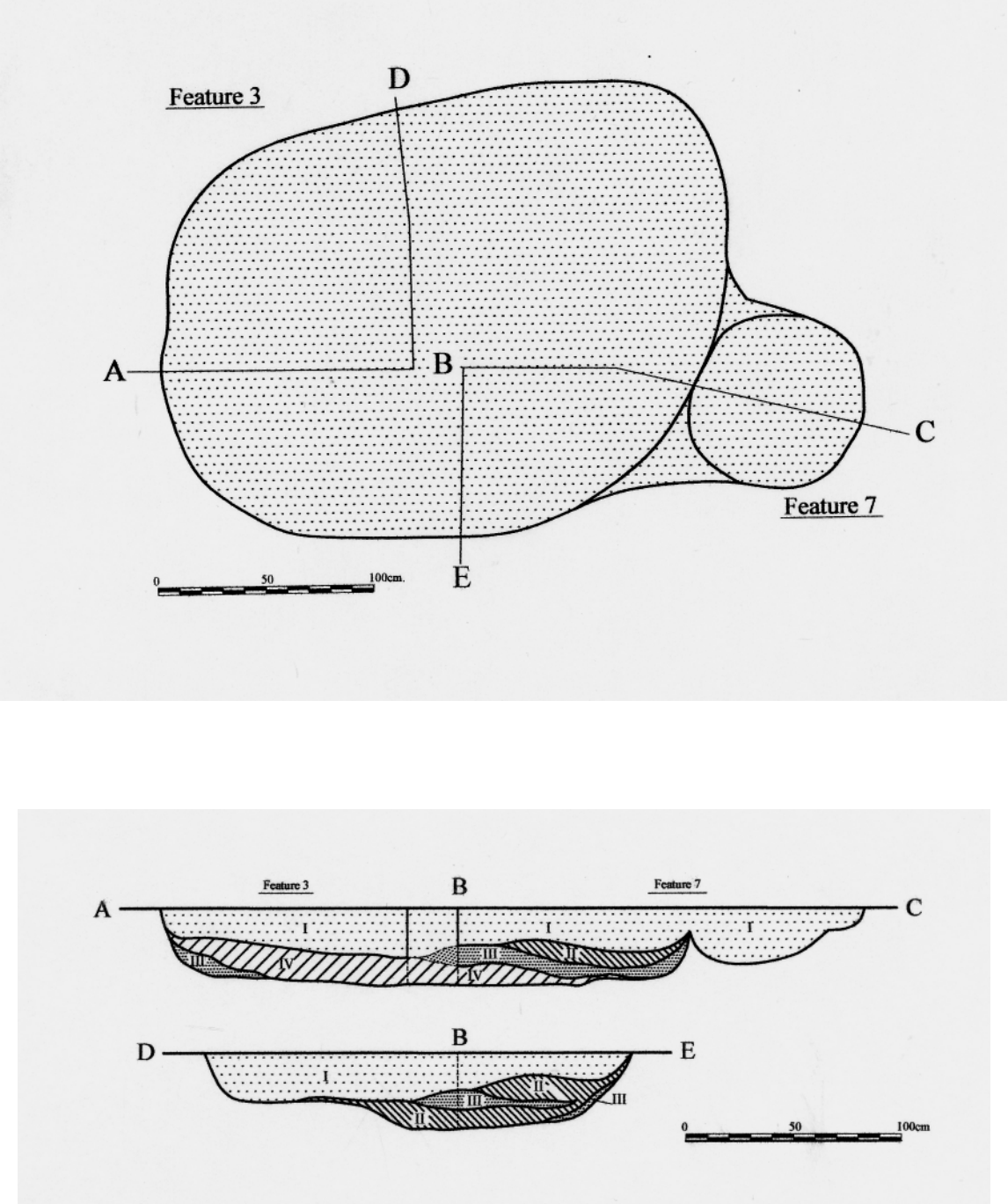


Figure 33. Plan and sectional views of Features 3 and 7, Jones/Hillerman Site (11Mx306).

Figure 34. Plan view of Features 4 and 5 prior to excavation, Jones/Hillerman Stie (11Mx306).

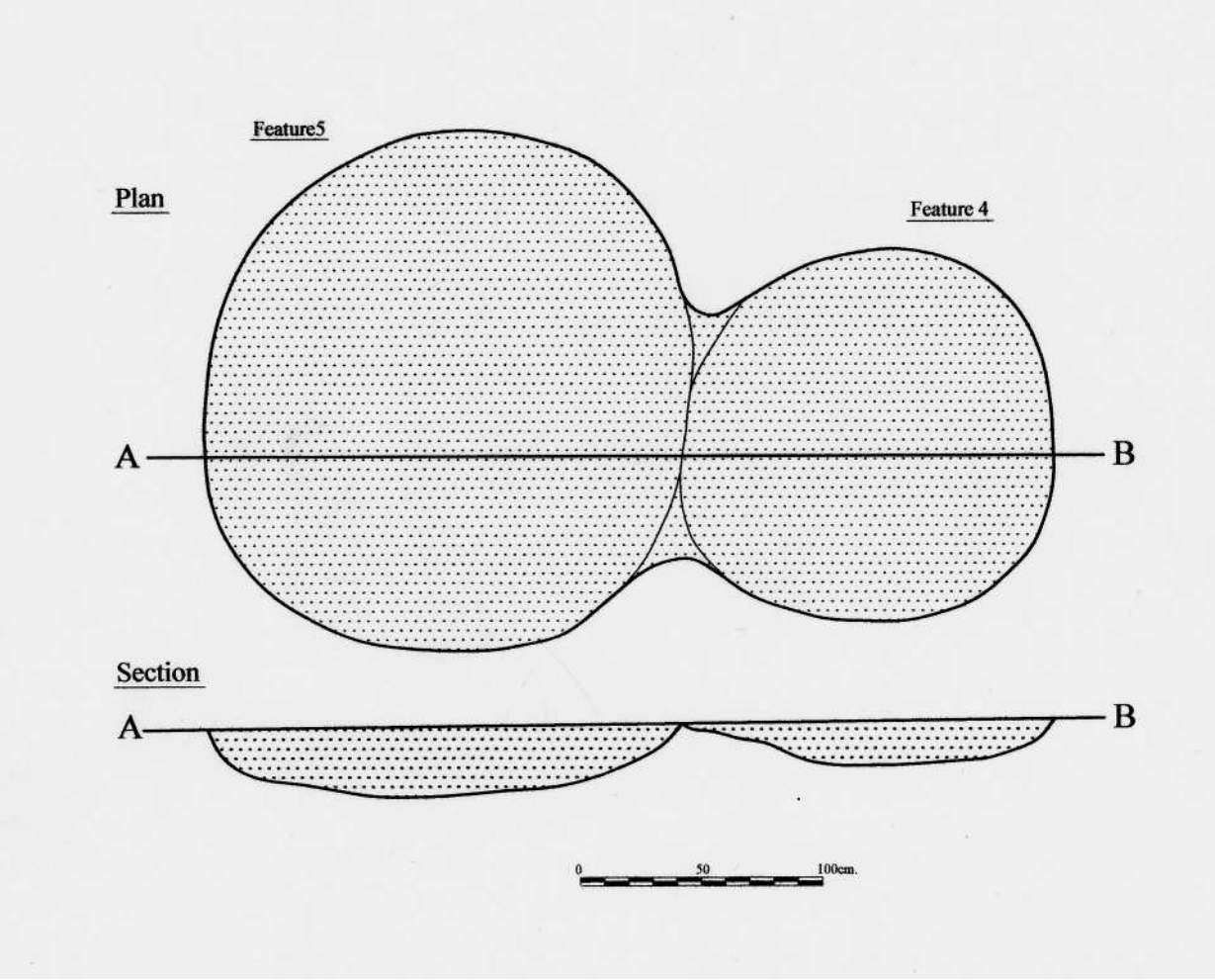


Figure 35. Plan and cross section views of Features 4 and 5 (Jones/Hillerman Site, 11Mx306).

Figure 36. Views of Feature 5 (top) and Features 4 and 5 (bottom) after excavation, Jones/Hillerman Site (11Mx306).

Figure 37. Plan view of Feature 4 prior to (top) and after (bottom) excavation, Jones/Hillerman Site (11Mx306).

Figure 38. Plan view of Feature 6, Jones/Hillerman Stie (11Mx306) during the Phase II investigations. No excavation of this feature was undertaken at this time.

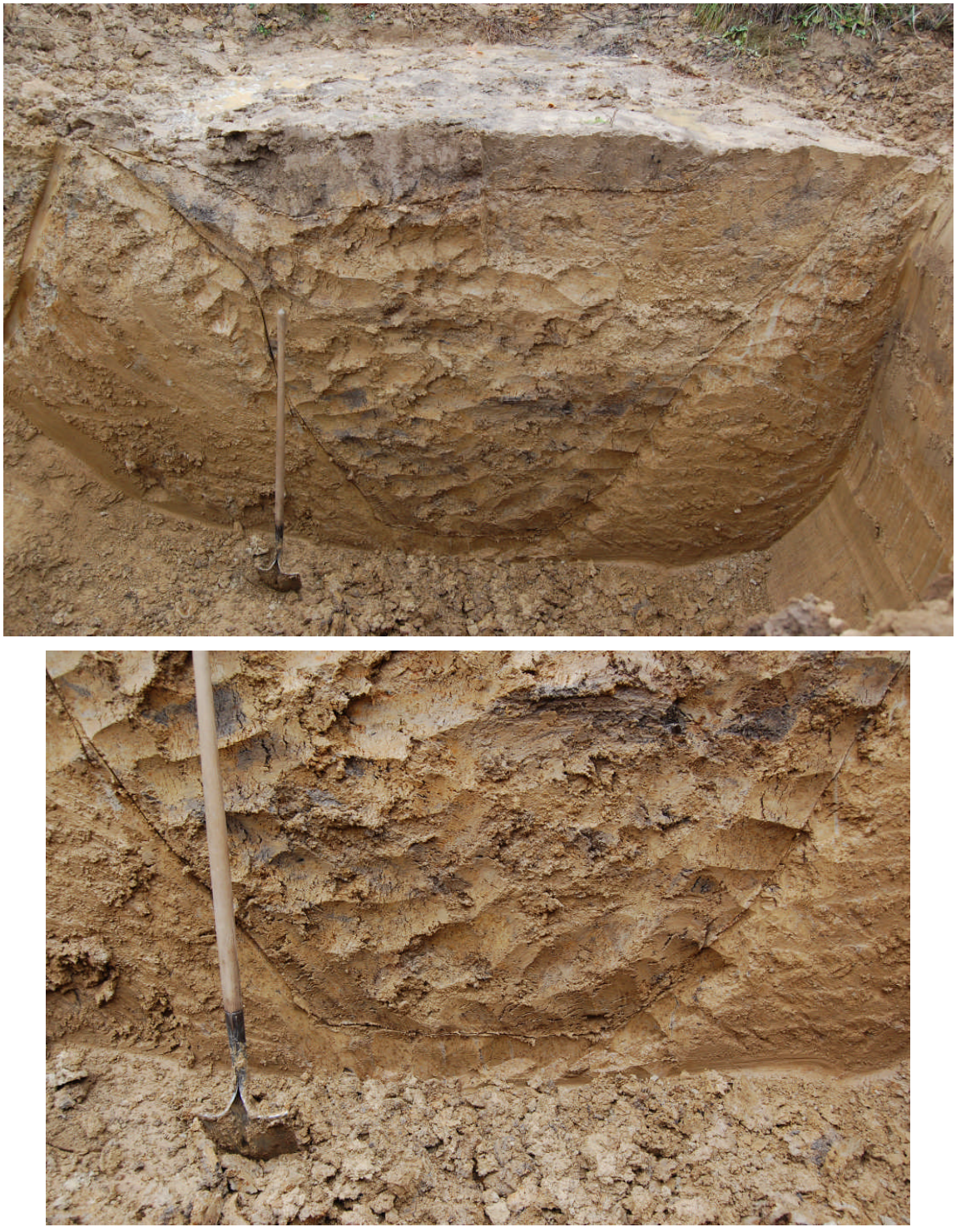


Figure 39. Two views of Feature 6 during excavation.

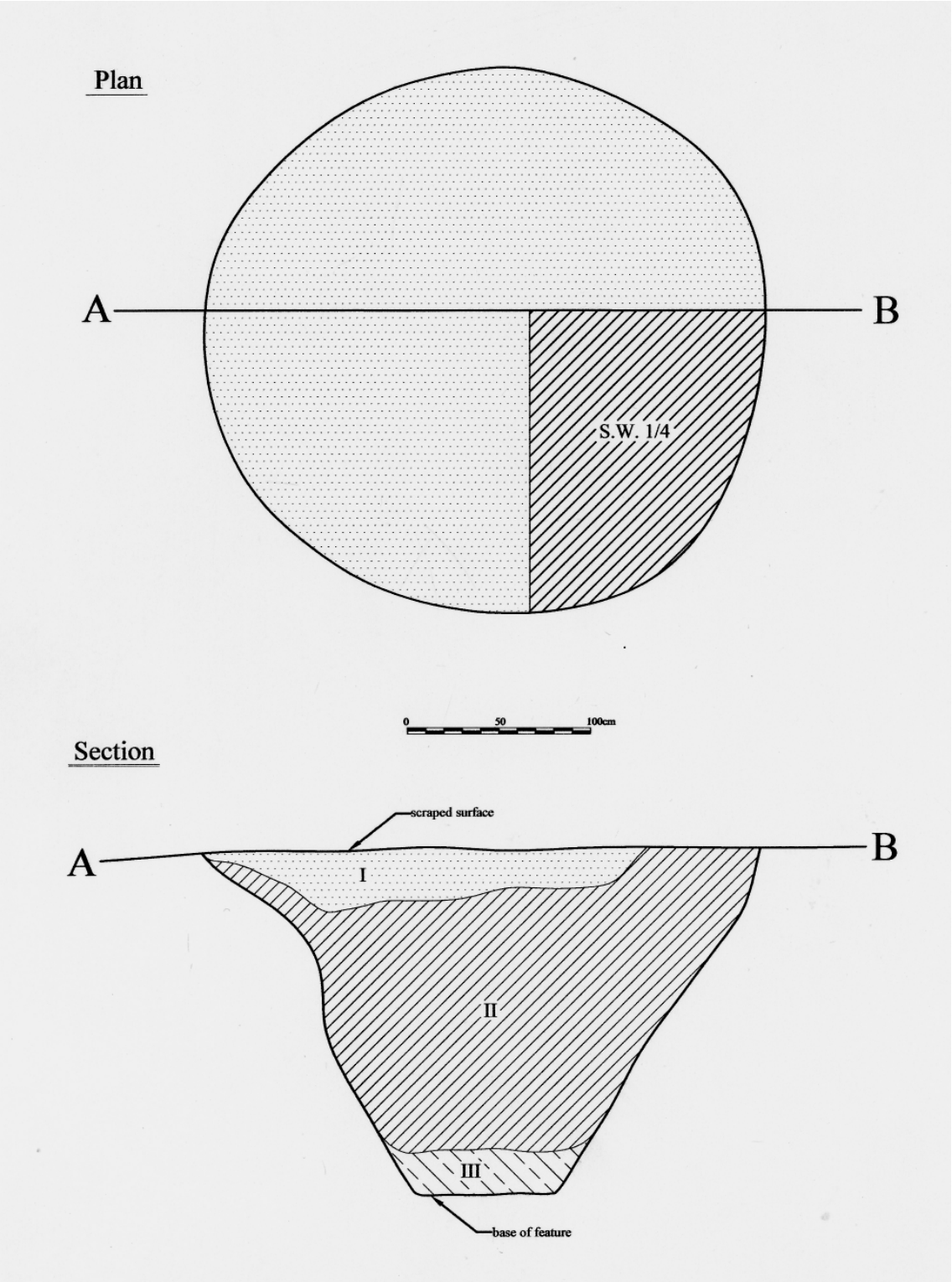


Figure 40. Plan and profile of Feature 6, Jones/Hillerman Site (11Mx306).

Figure 41. Views of Feature 7 after excavation, Jones/Hillerman Site (11Mx306). See plan and sectional views with Feature 3 (Figure 33).

Figure 42. Two views of Feature 8 during excavation (see Figure 29 for plan and section view of this feature).

The Material Basis of Early Rural Lifeways in Illinois: A View From Little Egypt

Although historic farmstead sites have been the focus of archaeological studies for nearly three decades in Illinois, the holistic study of the rural community generally has eluded archaeologists.[7] As noted by Groover (1992), whereas other professions have contributed to our understanding of the rural community, historical archaeology has failed to contribute much to our understanding of the agricultural community.[8] Similarly, renowned historian John Mack Faragher (1986:xiv) has stated, "historians have devoted increasing attention to the study of community in American History, but despite the fact that until relatively recently, the majority of Americans lived in the open country, those studies have generally focused on towns, villages, and cities." Although the concept of "community" has been difficult to define in both archaeological and anthropological terms (cf. O'Brien et al 1982:302; Gjerde 1979:405; Sussman 1959), it roughly equates with an interacting social unit with common goals and institutions.

The basic building block of the rural community is the family and/or individual household. During the nineteenth century, the mode of production of the vast majority of the households within a rural community was agricultural production, or farming. The rural community did not consist solely of farmsteads, but was part of a larger economic system that included rural home sites (non-farm rural residences often occupied by craftsmen and/or tradesmen), rural industrial and/or craft-oriented sites, small rural hamlets (offering services to the rural farm families) as well as larger village communities with merchants and industrial production.[9] Similarly, the rural farm community varied dramatically in social differentiation and stratification. As a quick perusal of the 1850 Agricultural census indicates, farmsteads varied dramatically in size, structure, and adaptive strategies.

Many researchers, from a wide range of disciplines (anthropology, social history, folklore) have stressed the role of the everyday or commonplace artifact in interpreting past

[7] The importance of the community study approach to historical archaeology is well illustrated in Cusick (1995).

[8] There exists a need for a definition of terms at this point in time. Farmstead archaeology focuses its attention on the agricultural and domestic components of the family farm. We should note that the rural landscape also contains a wide range of non-agricultural sites related to the state's domestic and industrial past. With this in mind, some researchers contrast "urban archaeology" with "rural archaeology"—often in conjunction with the unique field problems associated with urban research. As such, farmstead archaeology generally is considered a subdivision of "rural archaeology." Having said that, though, early farmsteads have been excavated within urban contexts. The archaeology of farmsteads should be conducted in a context that includes the entire rural community, including rural craftsmen and/or industrial sites, hamlets, as well as the small agricultural village.

[9] Discussing the 1940s cultural landscape of the United States, Trewartha (1943:37) defines "primary hamlets" as "agglomerations of people together with their residence and work units." He further notes that "there must be a minimum of, (1) *four* active residence units, at least two of which are non-farm houses; (2) a total of at least *six* active functional units, --residential, business, social or otherwise; and (3) a total of at least *five* buildings actively used by human beings." Under such a definition, a hamlet would have a minimum population of 16-20 individuals. It is questionable if small rural "communities" during the pre-Civil War years in Illinois would meet this definition. As such, I refer to this low order agglomerated settlement type consisting of a cluster of non-farm dwellings and individuals that supplied the rural community with necessary services as a service center or hamlet.

lifeways (cf. Glassie 1968; Quimby 1978; Schlereth 1980, 1982, 1985). By putting the artifact in its proper cultural context, much can be learned about the society that produced and used that artifact. The farmstead (generally consisting of a farmhouse, barn, and surrounding cultural landscape) and contemporary rural sites are nothing more than a very large and complex artifact that contains a wide range of data sets that can contribute to our understanding of nineteenth century lifeways (Mansberger 1981; Mansberger and Dyson 1990).

The multidisciplinary approach of historical archaeology has the advantage of viewing the agricultural history of the state in a new perspective—one that incorporates traditional history, with social history and material culture studies. Historical archaeology provides an excellent opportunity to contrast the historical record (and/or our perceived idea of the past) to a more holistic past (that lacks the biases of the written record). Often the documentary and archaeological records are contradictory, and it is our ability to critically examine all data sources that gives historical archaeology its unique view of the past. Historical archaeology, as with all archaeology in general, is a material culture approach to the study of social history with research interests solidly based in anthropology. Through the study of material culture remains (whether representing the discarded food waste and broken dishes from the kitchen table, the remains of the family house, or the pattern of fence posts within the surrounding farm yard), the archaeologist attempts to document the economic and social well being of the rural settler, and address a wide range of research questions.

This material culture approach to rural lifeways has been espoused by Charles Orser, Jr. in his book *The Material Basis of The Postbellum Tenant Plantation: Historical Archaeology in the South Carolina Piedmont.* Orser's (1988:9) approach to historical archaeology is a distinctive historical materialist approach to cultural studies with an emphasis on the "basic physical aspects" of the southern plantation system. As Orser (1988:9) stresses, "the material aspects of the lives of plantation inhabitants—landlords, managers, and tenants—must be studied first in order that other analyses focused on different aspects of plantation life might eventually follow." This form of research stresses a commitment to "thick description" of both the aboveground and belowground components of these agrarian sites, and the development of comparative database for these sites (cf. Schlereth 1985:165; Mansberger 1993). As Groover (1992:12-13) also has noted, previous farmstead archaeology in Illinois has produced a body of literature that has "minimal data comparability, and conclusions largely devoid of interpretive value." The basis of all archaeological synthesis is data generated from good fieldwork—fieldwork that focuses on documenting the entire site and not just the domestic component of these sites.

The basic material aspects of the plantation system that Orser (1988) discussed include 1) settlement, 2) housing, and 3) material possessions. Similarly, Groover (1992:4-5) outlines multiple data sets that "will provide [a] comparative information baseline… which can be used to construct a general and preliminary interpretive model for the emergence of rural modernization in Illinois." The data sets outlined by Groover (1992:13) include 1) site structure, 2) architecture, 3) subsistence practices, 4) foodways, and 5) "the general range of material culture present at the farmsteads." In complete agreement with Groover (1992), this report stresses the need for the collection of comparable data ("the basic material aspects") from a wide range of farmsteads and associated rural sites that is currently lacking within the state—and that such data collection will lead to the identification of site variability, and a more holistic interpretation of nineteenth century rural lifeways. The following discusses the Jones/Hillerman Site in terms of these larger criteria (site structure and material culture), and compares the features and artifacts

recovered from the Jones/Hillerman Site to those recovered from a handful of contemporary sites located in Illinois.

Site Structure

The study of rural communities must assess the relationship of the people to the land. In order to understand the nature of the rural agricultural community (and the associated rural service centers), we must first be able to describe the physical attributes of the community structure. Two levels of analysis are needed. On one scale, we need to identify the various site types, and their relationship to their physical surroundings and to other sites. Determining the variability of site types (a settlement system analysis), and the location of such site types on the landscape, is the first step in this process (South 1979). Site function is inferred by a variety of data (site size, location, layout, type of artifacts present). On the other level, we need to understand the structure of each individual site to compare sites of similar type, whether farmstead, rural home site, or hamlet.

The Jones/Hillerman Site is located within close proximity to the Ohio River bluff crest, near the wooded headwaters of a small intermittent stream. Although not clear, it may have been situated within relatively close proximity to an east/west road that paralleled the Ohio River Valley across the entire width of the State of Illinois (and locally connected Fort Massac with the nearby Cantonment Wilkinsonville). Although when initially improved, this site would have been fairly well removed from the nearest hamlet and/or village, it would have been in fairly close contact with the outside world via both the Ohio River and this road. The farm was located on lands identified as "dry barrens" during the early 1860s—and suggests the relatively poor quality and marginal character of the farm lands at this location. During its later years of occupation, the site was in close proximity to the Ohio River landing townsite of Hillerman. The site was located on the slopes of a low ridge, approximately 100' from the adjacent stream.

Site structure (defined as the spatial relationship of the subsurface features, middens, and surface scatter present at a site) is an important variable in interpreting a farmstead or any other rural site. A site's size and complexity (as determined by the number of and super-positioning of features) all contribute to addressing a suite of questions related to the activities (whether domestic, agricultural or commercial) conducted at a particular site. Past archaeological research in Illinois generally has failed to understand the complex structure of farmstead sites, having often focused on the more substantial, artifact-rich deposits associated with the domestic component. These investigations often fail to understand the complexity of surface middens and activity areas at the site, particularly those associated with non-domestic, agricultural activities.

Two aspects of an archaeological site's structure warrant documenting. The most obvious is the site plan that illustrates the location and type of subsurface features present. Through the years, this has been attained by removing the plow zone from a site with heavy equipment and mapping the subsurface features. As Bareis and Porter (1984) has emphasized so well with prehistoric sites, this strategy generally can not be accomplished by hand excavating a series of small excavation blocks, and is best conducted with earth-moving machinery. For many years, this strategy has often been accomplished without any detailed understanding of the surface distribution of artifacts in the plow zone at historic sites. Unfortunately, many nineteenth-century structures and associated activity areas at rural sites do not have a subsurface component and are difficult to discern without an understanding of these surface deposits. Only recently has much effort been given to the research value of surface deposits on plowed sites in

Illinois. Early attempts at this research strategy include Blank-Roper (1987:1-9), Schroeder (1990), and Mansberger and Halpin (1991). During the late 1980s, Fever River Research fine-tuned the laboratory and field strategy for analyzing the surface scatters as discussed in this report (See Mansberger and Halpin 1991 for details).[10] Nonetheless, this is a difficult (if not impossible) process in wooded environments. Attempts to get data from shovel testing strategies have been of limited success, and it has been difficult to compare surface collection data to shovel test data. Similarly, the analysis of the surface collection data from short-term sites such as the Jones/Hillerman Site (with their low artifact density) has been of limited success.

The Jones/Hillerman Site was relatively small with a very low density of surface artifacts. The site size and relative low density of artifacts on the surface of the Jones/Hillerman Site is consistent with other short-term rural sites of this era in Illinois. Similarly, the artifacts on the surface are very small in size, due in part, to the extensive post-abandonment agricultural activities on the site. Short-term site size may be somewhat dependent on a site's initial setting—both structured by physiographic and/or topographic factors (size of ridge) as well as ecological factors (timber or prairie vegetation).

One of the more interesting aspects of the research strategy used on these sites is the correlation of surface artifact signatures with subsurface features. Often the surface scatters at these sites retain sufficient integrity—even after years of plowing—to yield information regarding the size, character, and location of the middens that developed at a site during its occupation. In many cases, the surface midden does not necessarily reflect the location of the subsurface features—with the subsurface features often ringing the edges of the dense inner yard midden. In other cases, the post-abandonment fill within a large feature such as the cellar at the Gifford Site, or the pits at the Jones/Hillerman Site, masks the ephemeral midden's signature—making the interpretation of the surface midden more difficult, if not impossible.

Subsurface site structure at short term sites such as the Jones/Hillerman Site are generally fairly simple, with a very limited number of subsurface features present and little evidence of superpositioning being present. Eight relatively substantial subsurface features were identified at the Jones/Hillerman Site. The features excavated at the Jones/Hillerman Site were of three basic forms, which included 1) circular to oval, shallow basins (n=5), 2) small rectangular, straight-sided and flat-bottomed pits (n=2), and 3) deep circular shafts with prominently inward sloping walls (n=1). Distinctively lacking from this site were the large rectangular, straight-sided, flat-bottomed pits that functioned as cellars, and deep shaft pits (wells).

Shallow basins: These pits were slightly oval to circular in plan, shallow, and basin-shaped. Fills within these pits consisted of high concentrations of wood ash, charcoal, and small domestic artifacts—probably originating from the disposal of household slop buckets and/or hearth cleanings. Artifacts within these pits were generally small in size and represented only a small fraction of the whole artifact. The fill and associated artifacts probably represent secondary filling activities and were not associated with the original or primary function of the pit.

[10] The strategy used during this research has developed from work conducted by Randall Moir in Texas (Moir 1981, 1982, 1983, 1984, 1987, 1988). Moir, whose work was influenced by Lewis (1976, 1977) and Ferguson (1977), emphasized the interpretive value of sheet refuse or middens. According to Moir (1987:23), "sheet refuse emerged as the most predictable, substantive and all pervasive archaeological resource found on these [farmstead] sites."

Several potential interpretations of these pits come to mind—and it is possible that they had multiple functions. One potential function of these pits is as a small borrow for the preparation of daub, which was used for the construction and periodic maintenance of log structures and primitive fireplace/chimney stacks. The presence of multiple pits of this type, with their uniform shape argues against this function. Another potential interpretation is that they functioned as storage facilities for fruits, vegetables and root crops for use by the family. Features 1, 4 and 5 clearly fit this description. Feature 3, although basin shaped, is slightly larger in plan and depth than Features 1, 4, and 5—and potentially centrally located within this feature cluster. It is not clear as to whether Feature 3 functioned in a similar manner as these other pits, or whether it had a different function (even potentially functioning as a sub-floor cellar). Feature 3's oval shape and distinctive basin shape argues against its use as a more formal, sub-floor cellar. Similarly, Feature 7, although basin shaped, is considerably smaller than Features 1, 4, and 5—and it is not clear as to its function either. Feature 7 clearly seems small to have functioned as a crop storage facility such as that envisioned for Features 1, 4, and 5. If it indeed functioned in a similar manner, it stored a very small quantity of foodstuffs.

Small rectangular pits: Two small, shallow, and rectangular pits (Features 2 and 8) were present. These pits were in close proximity to one another and "clustered" towards the northeast edge of the site. These pits had relatively square corners, straight to slightly sloping walls and flat floors. Due to the slightly basin shape of the pits, it is doubtful that the pits were lined with planks. The light colored fills lacked cultural mottling and inclusions, and was very different in character than the adjacent Features 1, 3, 4, 5 and 7. Additionally, although artifact numbers were low in these features, they contained a much higher percentage of whole and/or restorable items. Although the form of these pits is consistent with an interpretation of a privy pit, the features lack distinctive organic-rich fecal deposits typical of privy pits. As such, they have been interpreted as small sub-floor storage facilities (cellars).

Circular shafts: Feature 7 was distinctively different than all the other features at this site. This pit was a relatively deep, large diameter circular pit with distinctive inward sloping walls. No evidence of an interior lining (such as a central wood, stone, or brick shaft or mortar placed directly on the outer walls) was identified. The fill sequences within the pit clearly indicate that a central lined shaft (such as that associated with a well) was not removed or robbed out from this feature.[11] The function of this feature is relatively unclear. The original perception is that this feature represented a shallow well (perhaps wood lined), but the fill sequence and lack of differential fills in a central shaft argue against that interpretation. Similar features are often referred to as "unlined cisterns" in the professional literature, but the lack of a lining strongly argues against such an interpretation. The most logical interpretation is that this feature represents an exterior storage pit—albeit with a much greater storage capacity—similar in function to that represented by Features 1, 4, and 5. This feature was located along the edge of the site, in a similar setting as Features 1, 4, and 5.

The Jones/Hillerman Site lacks structural features such as piers, posts, or perimeter foundations, which is suggestive of impermanent construction techniques associated with log architecture. Many of the early, first generation farmsteads in Illinois have very few subsurface features, which is indicative of the character of the somewhat impermanent log architecture that

[11] Shallow wells often exhibit evidence of a central shaft with a later fill, surrounded by an earlier fill sequence representing materials backfilled against this shaft wall, which had slumped into the depths of the shaft or was removed presumably after the abandonment of the site.

was common at the time.

Material Possessions and/or Artifact Analysis

As discussed above, the archaeology of the Jones/Hillerman Site has contributed significantly to our understanding of the physical structure of the early site and has resulted in the collection of a substantial number of artifacts that allows us to discuss both the range in activies undertaken at this site, as well as the quality of life of the occupants of this pre-Civil War site (and contribute to our understanding of this formative period). Although the artifact density at this site was not exceptionally high, the physical remains represent a relatively short term, middle-to-late 1830s rural occupation that occurred within only a couple of years of the township's initial occupation by Euro-American farmers. Artifact assemblages (such as the broken ceramics, glass, metal items and bone recovered from the Jones/Hillerman Site) have the potential to teach us about a wide range of everyday activities associated with the past lifeways of this abandoned rural site. Many of the activities, which these artifacts document, are poorly documented in the historical record, whether in a farmstead, rural service center, or hamlet/village setting. The following discussion elaborates on the quantity, quality, and diversity of the artifacts recovered from this site.

A total of 3,076 artifacts were collected from the archaeological investigations at the Jones/Hillerman Site. Appendix II consists of a lot by lot inventory of the artifacts from this site. The accompanying Appendix I consists of the provenience information for each of these excavation locations (or "lots"). The vast majority of these artifacts were small in size, and represented household trash (kitchen and/or hearth cleanings from slop buckets) discarded in the pits. The ceramic and glasswares recovered from the site generally represented a small percentage of the larger whole items (and referred to as secondary artifacts). Whole and/or primary artifacts were few in number from this site.

The artifact analysis consisted of sorting all collected material into one of nine functional categories. These functional categories were initially defined by Orser, Nekola and Roark (1987) and slightly revised for our Midwestern studies by Mansberger (1990; see also Mansberger and Halpin 1991). These categories differ from the more widely used functional categories defined by South (1978) and more accurately reflect nineteenth century domestic sites in Illinois. These functional categories consist of Foodways Service (ceramic and glass tablewares and other artifacts associated with the serving of foods); Foodways Storage and Preparation (artifacts associated with the preparation and/or storage of foods); Foodways Remains (the actual faunal and/or floral remains of foods); Household/Furnishings (artifacts associated with furniture and the furnishing of the home); Labor/Activities (artifacts associated with various non-kitchen or non-Foodways tasks conducted around the site), Architecture (physical remains associated with the fabric of the house and/or other buildings); Personal (non-clothing related artifacts associated with the individual, including alcoholic beverages and smoking related items); Clothing (small items of clothing); and Indeterminate (artifacts of unknown function).

Table 1 summarizes the functional diversity of the artifacts collected from the combined surface and feature excavations at the Jones/Hillerman Site. A more detailed version of this table (Table V.1)—as well as several additional tables summarizing the artifacts from this site—is presented in Appendix V. Over 80% of the artifacts from the Jones/Hillerman Site were represented by artifacts from three functional categories--Foodways Service (representing 39.3%

of the artifacts), Foodways Remains (representing 27.6% of the artifacts), and Architecture (representing 13.4% of the artifacts) from this site. The remaining five functional categories comprised the remaining 19.6% of the artifacts from the site. Each of the nine functional categories is discussed in detail below.

Table 1

Artifacts By Functional Group

1. Foodways Service	1210	39.3%
2. Foodways Storage and Pre	73	2.4%
3. Foodways Remains	849	27.6%
4. Personal	144	4.7%
5. Clothing	42	1.4%
6. Household Furnishings	7	0.2%
7. Architecture	412	13.4%
8. Labor and Activities	301	9.8%
9. Indeterminate	38	1.2%
Grand Total	3076	

Foodways Service. Artifacts from the Foodways Service category are items associated with the consumption of food and beverages—a task that takes on great significance to all families (whether rich or poor). At most archaeological sites, this category consists predominately of refined ceramic, and occasionally glass, tablewares. Artifacts from the Foodways Service category at the Jones/Hillerman Site comprised slightly over 39% of all the artifacts recovered from the site.

Refined ceramics are generally described in terms of their ware type (i.e., creamware, pearlware, and whiteware), decoration, and vessel form. Whereas ware type generally infers temporal information (age of occupation), discussions of the decoration and vessel form generally infers social status and vessel function (which has dietary, as well as social status implications). Although refined ceramics consist of occasional toilet wares and household items, the vast majority of the refined ceramics at pre-Civil War Illinois sites are generally tablewares. Small sherd sizes (such as those recovered from middens) often make it difficult to assess vessel forms with much certainty. Nonetheless, when possible a determination of vessel form is attempted. A few exceptions are noted in the discussion that follows.

Creamware is a finely potted earthenware with a yellowish or cream-colored paste and clear lead glaze (Noel Hume 1970, 1973; Towner 1957). This ware, with its distinctive yellowish or greenish colored glaze, was produced from circa 1760 through the second decade of

the nineteenth century. By the 1820s, this ware is most often associated with cheap, undecorated tablewares (mostly plates and platters). Creamware was mostly non-existent at the Jones/Hillerman Site. It was represented by a single sherd (representing 0.1% of the ceramic wares) and a single vessel (representing 1.1% of the ceramic vessles) at the site. The single vessel was represented by an undecorated chamber pot lid (Vessel 49). These vessels, along with several other pearlware vessels, probably represent older pieces of ceramics brought to the site by the occupants—potentially heirloom or older curated pieces.

Pearlware is a finely potted white paste earthenware with a clear lead glaze that was developed in England during the 1780s (or earlier). The pearlware glaze has small additions of cobalt that gives it a bluish cast and a deep blue color where the glaze puddles in crevices (such as around foot rings on cups or plates). A major characteristic separating pearlware from later whiteware sherds, some also with a bluish cast to their glaze, is the thin-bodied, finely potted nature of the pearlware. By the early to middle 1830s, pearlware had run its course in America and was being replaced by heavier whitewares (Noel Hume 1969, 1970, 1973; South 1972; Towner 1957). Domestic sites that were occupied during the 1820s and 1830s should exhibit a significant percentage of pearlware sherds. The percentage of pearlware sherds recovered should be less pronounced the longer the occupations of those sites persisted into the 1840s and later.

With its thin body, angular cut feet, and deep blue glaze, early pearlware is easily distinguished from whiteware. But later pearlware from the 1820s and 1830s is often difficult to distinguish from whiteware, thus making a discussion of pearlware and whiteware distributions difficult at best. Nonetheless, an attempt to separate the vessels by ware was made, with pearlware comprising approximately 3.4% of the ceramic sherds and 4.3% of the ceramic vessels from the Jones/Hillerman Site. A total of four pearlware vessels were present at the site. These included a polychrome painted saucer (Vessel 22), a dark blue printed cup (Vessel 80), and two small plates (Vessels 74 and 97). One small plate was edge decorated (green) whereas the second was printed (dark blue). The painted saucer had an unidentified, impressed backstamp in the form of a three-bladed "propeller." Like the creamware vessels noted above, these early pearlware vessels probably represent older heirloom or curated pieces brought to Illinois by the site occupants.

As with most sites from this era, whitewares comprised the vast majority of the refined ceramics from the Jones/Hillerman Site. Whiteware is a refined white paste earthenware with a clear, colorless alkaline glaze that usually lacks the colored tints of both creamware and pearlware. Whiteware, a much heavier, molded ware with a thicker body than pearlware or creamware, began replacing these earlier ceramics during the late 1820s and early 1830s. By the middle 1830s, whiteware production had all but replaced that of pearlware (Price 1979:11; Noel Hume 1970:130-131). At the Jones/Hillerman Site, whitewares consisted of 90% of all the sherds and 89.1% of the vessels recovered from the site. Whitewares included a wide variety of vessel forms, and included cups, saucers, plates, platters, teapots and/or sugar bowls, waster bowls, and chamber pots.

Ironstone (also known as "Stone China," "New China," or "Semi Porcelain") is a hard paste earthenware with a semi-vitrified paste (which borders on being a stoneware) and clear alkaline glaze. As early as circa 1805, the English potter Spode was manufacturing a hard paste earthenware; and in July 1813, Charles James Mason patented his "Ironstone" (and the term came into use). Although introduced relatively early in the nineteenth century (Godden 1966), ironstone generally did not become a major component of ceramic assemblages in Illinois until

the early 1840s or early 1850s. Ironstone was poorly represented at the Jones/Hillerman Site. It consisted of only two sherds (representing 0.2% of the sherds count) and one vessel (representing 1.1% of the ceramic vessels). The single vessel consisted of a serving vessel handle (Vessel 43).

Porcelain is an expensive, high fired (vitrified), translucent ceramic ware that has been recognized as a sensitive indicator of status for many years (Miller and Stone 1970, Stone et al. 1972). Based on sherd count, 6.4% of the refined ceramics from the Jones/Hillerman Site were porcelain. Based on vessel count, 4.3% of the wares were porcelain (see Table V.2). These four vessels were represented solely by teawares, and included two cups (Vessels 29 and 48) and two saucers (Vessel 30 and 98). The porcelain teawares were overglaze painted polychrome (see Figure 57).

Copper lusterware is a distinctive, red paste stoneware with a combination of surface treatments that include colored slip decoration, clear lead glaze and distinctive metallic wash (made from a thin gold slip) that attempts to imitate more expensive copper wares. Although common in Near Eastern ceramics for centuries, it was not manufactured in England until the early 1800s (Godden 1966:xxiv). Copper lusterware salts, small bowls, and cream pitchers are often found on sites dating to the early nineteenth century. Such wares were absent from the Jones/Hillerman Site. Similarly, refined red-paste earthenwares (i.e., redware tablewares) are often found in very limited number on sites pre-dating circa 1835 in Illinois (Mansberger 2001, 2009). None were found at the Jones/Hillerman Site.

Besides ware type, refined ceramics are often separated into several distinctive decorative categories (see Figures 43-57; Tables V.2 and V.3 in accompanying appendices). Based on sherd counts, the Jones/Hillerman Site refined ceramic assemblage consisted of 39.4% undecorated wares, 0.9% annular decorated wares, 13.1% edge decorated wares, 28.4% painted wares, 3.0% sponge decorated wares, 0.3% painted and sponge decorated wares, 14.5% printed wares, and 0.5% relief decorated wares. When comparing individual vessels at the Jones/Hillerman Site, the assemblage consists of only 6.5% (n=3) undecorated vessels, 1.1% annular decorated vessels, 28.2% edge decorated vessels, 35.9% painted vessels; 9.8% sponge decorated vessels, 1.1% painted and sponge decorated vessels, 14.1% printed vessels, and 3.3% relief decorated vessels. The ceramic vessels from the Jones/Hillerman Site are represented by a relatively high percentage of undecorated and minimally decorated (edge decorated, painted, sponge decorated) wares, and conversely a low percentage of printed vessels. The initial impression is that this is suggestive of a lower socio-economic standing of the site inhabitants.

The undecorated wares from the Jones/Hillerman Site were represented by three plates and a single cup. One of the plates had the distinctive impressed anchor-shaped backstamp of the British pottery firm of W. Davenport and Company (ca. 1793-1887). This mark, which incorporated the words "DAVENPORT / GRANITE" into its design, also contained a numeral each side of the anchor. The two numbers corresponded to the year that the plate was manufactured (1840) (Godden 1964:189). A second plate had a similar Davenport mark but lacked that portion of the mark with the manufacturing date (see Vessels 5 and 62). Annular decorated wares were represented by a single waster bowl. Edge decorated wares were represented solely by tablewares (small plates, plates, and platters). In contrast, the painted and sponge decorated wares were represented predominately by teawares (cups, saucers, and a potential teapot or sugar bowl lid). A couple of painted plates were also present. The printed wares from the site were represented by predominately teawares (cups and saucers) and to a

lesser degree, tablewares (small plates). At least one of the edge-decorated plates was marked with an impressed ADAMS mark. William Adams, a British ceramic manufacturer, used this mark on everyday earthenwares from 1800-1864 (Godden 1964: \21).

As noted above, the tablewares (which consisted predominately of small plates, plates, and a single platter) were represented predominately by edge-decorated wares. The edge-decorated wares at the Jones/Hillerman Site were represented by a range of colors, consisting of blue, green, and red edged examples. Although none of the edge-decorated wares were deeply and irregularly scalloped as with the Roccoco-decorated wares of a generation earlier, the majority of the edge decorated wares from this site had scalloped edges. The smaller plates had very shallow and regular scallops. Several of the edge decorated wares were of an early form that exhibited a simple blue painted edge, lacking the impressed "feathering."

Table 2

Painted Ceramic Vessels from the Jones/Hillerman Site

	Color	Sherds		Vessels	
painted					
	flow blue	61	17.99%	5	15.15%
	monochrome blue	26	7.67%	3	9.09%
	monochrome green	1	0.29%	0	0.00%
	monochrome red	2	0.59%	0	0.00%
	polychrome	249	73.45%	25	75.76%
		339		33	
	Grand Total	339		33	

The teawares (cups, saucers, and teapot or sugar bowl lid) from the site were represented by a high percentage of painted and sponge decorated wares, and a lesser number of printed wares. The painted wares were represented by a variety of monochrome and polychrome patterns (see Table 2). The monochrome blue patterns typical of the 1810s through early 1830s were relatively low in this assemblage (comprising approximately 9% of the painted vessels). The majority of the painted wares were represented by small polychrome floral patterns (often referred to as sprig wares). At least two painted vessels (Vessel 24 and 39) manufactured by William Adams were identified in this assemblage.

One distinctive painted polychrome pattern was noted in this assemblage. This pattern (identified on Vessel 91) consists of a rather complex floral pattern that is comprised of numerous small floral elements. This pattern is referred to as the "Bourbon Sprig" or "Cornflower" motif (Figure 47), and apparently originated at the Sevres China factory in France

during the late eighteenth century.[12] According to Eberlein (1925:139), it was the Marie Antoinette that was responsible for the development of the distinctive floral pattern. Eberlein (1925:139) states that "the story is told that one day the Queen, on looking at a quantity of recently decorated porcelain, deplored the fact that she saw abundance of roses, tulips, daffodils and other flowers of all colours save blue, a colour to which she was very partial. Hettlinger, one of the directors, at once thought of using the cornflower as a decoration to please the Queen, and thenceforth it became vastly popular as a motif, not only at Sevres but at all the other porcelain factories as well." When Thomas Jefferson traveled to Paris in 1784, he purchased several ceramic items that were decorated in the classic Bourbon Sprig or Cornflower motif. Upon his return to the United States with these wares in the early 1790s, they quickly became of interest to his fellow countrymen (and women) (Garrett 1989:698). By circa 1800, English porcelain and earthenware factories were incorporating the Cornflower design into their ceramic decorating traditions. By the turn-of-the-century, the Coalport China factory was producing hard paste porcelain decorated with the Bourbon Sprig or Cornflower motif (Eberlein 1925:272).

The cornflower motif developed at Sevres soon became the basis for a variety of painted small floral motifs that were incorporated onto cheaper earthenwares (particularly pearlwares and later whitewares). English factories quickly incorporated the design into their ceramic painting repertoire—often with slight variations in the design elements. With distance and time, the classic Cornflower motif evolved, and by the 1830s, a great variety of Cornflower-like sprig patterns had been incorporated into the greater ceramic painting vocabulary, particularly on less expensive earthenwares. As one author of English ceramics noted, when discussing the Pottery and Porcelain of Swansea and Nantgarw, "the simplest of all the set patterns is the cornflower, or Bourbon sprig, disposed at regular intervals, usually in blue with green leaves and touches of red, but sometimes in red. Such patterns in enamel colours were very cheaply produced by poorly paid women and child painters, yet they are among the most tasteful and effective of the period, especially as the design is always in harmony with the form of the piece decorated" (Nance 1985:339).

Sponge decorated wares (Figure 50) were similarly highly colorful, and decorated in red, blue, red and blue, and yellow patterns. The red and blue sponge decorated wares were painted with alternating bands of color, and are often referred to as a "rainbow" pattern. One cup (Vessel 67) had a yellow sponge decorated exterior with a large polychrome painted motif which probably represented pea-fowl.

At the Jones/Hillerman Site, the printed wares (Figures 52-56) were represented by a variety of colors that included black, blue, brown, dark blue, flow blue, green, and red colors (see Table 3). Additionally, the printed wares were represented by two-tone prints consisting of both blue and green vessels, as well as red and green vessels (Figures 53-55). These two-tone wares were represented by a rim of one color and a central medallion of a second color. The two-tone prints comprised nearly 65% of the printed wares by sherd count, and approximately 31% of the vessel counts. The number of two-tone printed vessels is very high.

Due in part to the low number of printed wares recovered from the Jones/Hillerman Site, the number of identified printed patterns were few in number from this site. One pattern identified in this assemblage, on two vessels (Vessels 27 and 40), was the two-tone BELZONI

[12] Eberlein (1925:157) states that "the blue cornflower decoration, originated at Sevres…" The Bourbons were a dynasty that reigned over France from 1589-1792 and 1815-1848.

pattern, which was manufactured by Enoch Wood and Son (1818-1864). Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820"—which seems a bit early for this assemblage. A single example of a red printed cup (Vessel 38).identified as the SOWER pattern was also identified in this assemblage. Snyder (1997:28) suggests that this pattern was produced by William Adams in "circa 1835." A third blue printed saucer (Vessel 3) was decorated in an unidentified grape leaf and/or vine pattern similar to the pattern identified by Williams (1986:466) as "BIRD AT FOUNTAIN."

Table 3

Printed Ceramic Vessels from the Jones/Hillerman Site

	Color	Sherds		Vessels	
printed					
	black	1	0.58%	1	7.69%
	blue	6	3.49%	2	15.38%
	blue and green	24	13.95%	1	7.69%
	brown	3	1.74%	0	0.00%
	dark blue	11	6.40%	2	15.38%
	flow blue	10	5.81%	1	7.69%
	green	5	2.91%	0	0.00%
	red	23	13.37%	3	23.08%
	red and green	89	51.74%	3	23.08%
		172		13	
	Grand Total	172		13	

During this time period (1830s and/or 1840s), the ratio of hand painted to transfer printed sherds often is an indicator of the relative status of the family that deposited the assemblage. As noted above, the relatively low percentage of transfer printed wares (in contrast to the relatively high percentage of edge decorated, annular decorated, and hand painted wares) suggests the presence of a relatively low status family associated with the use of the artifacts discarded at the Jones/Hillerman Site—an interpretation that does not seem to be substantiated by the quantity, quality, and diversity of non-ceramic items at this site? At the Jones/Hillerman Site, the ratio of painted to printed wares—based on sherd count—was approximately 190:100. When comparing vessel counts, the same ratio is approximately 254:100. This relationship is actually higher if one incorporates the minimally decorated sponge decorated wares into this discussion also.

Another aspect of the ceramic assemblage that immediately becomes apparent is the multi-colored character of the wares. Blue and red sponge decorated teawares decorated in a "rainbow" pattern are present. Two-color transfer printed teawares decorated with a combination of red and green prints on the same vessel are also present. These printed teawares, which are decorated with the BELZONI pattern, were potted by Enoch Wood and Sons.[13] Similarly, the edge-decorated wares are a variety of colors, and although each ceramic item is decorated in a single color, the edge-decorated wares present at the site represent a suite of contrasting colors that include red, blue, and green edged wares.

The multi-colored ceramic wares from the Jones/Hillerman Site may attest to the participation of this family in a popular national style referred to as the "fancy aesthetic." According to Priddy (2004), people throughout the United States during the early years of the nineteenth century "lived in a world bursting with colors, patterns, and spirited artistic expressions." To Priddy (2004), the *Fancy Aesthetic*

> relied upon strong first impressions that caught the eye, fueled the emotions, and impressed itself on the memory. [and]… these fancy possessions reflected their owner's new and enlightened way of seeing, understanding, and responding to the surrounding world. The decorative nature of the fancy style—whether expressed in exuberantly ornamented surfaces or wildly imaginative forms—was never considered its most significant aspect. Rather, the ornaments served to inspire the intellect, and functioned as reference points that elicited strong emotional responses because of their implicit connection to people, things, and ideas. Most nineteenth-century viewers did not receive information passively from these decorative goods but expected to participate actively in an intellectual and emotional process, centered on absorption and response, allusion and association (Priddy 2004:94-95).

According to Priddy (2004), the fancy aesthetic, which evolved into a popular style, was a subconscious, but nonetheless active force in the early nation. Priddy (2004) continues by noting that "For Americans… who gravitated to the power of fancy, the lively fancy style would have provided both a desirable antidote to the restraint of reason and an alternative to the understated expressions of classical taste that had dominated American life throughout most of the eighteenth century" (Priddy 2004:96). Priddy (2004:98) states that "Americans' pursuit of fancy things reached a peak in the 1820s and 1830s, causing the style to saturate the marketplace and the home, and inspiring an endless variety of decorative goods, from eye-popping wall coverings to children's seating."

Priddy (2004:98) states that "among the most stunning household wares were whimsical and colorful fancy ceramics, such as the 'Set Fancy Tea Cups & Saucers' that appeared in the Pennsylvania inventory of Joshua Evans in 1834, or the dozens of imported 'fancy quart bowls' and 'fancy pitchers' that were sold in 1826 by the Boston merchants Atkins and Homes." This "fancy style" is well illustrated by the ceramics from the Jones/Hillerman Site, and represents the last hurrah of this style prior to the introduction of the "whiteness" of the mindset common during the post 1830s Greek Revival period in the Midwest. Generally, there is wide variety in the color of both the painted and printed wares from this, and other sites, of this period. Early painted wares were often polychrome and exhibited a bright exuberance. With the advent of new

[13] Godden (1964) indicates that this firm was in operation from 1818 until 1846.

printing technology during the mid-to-late 1820s, these new colors also became available in printed wares. During the 1820s, painted wares are clearly colorful, but printed wares tended to be monochromatic (particularly blue)—due, in part to the technological inability to produce non-blue printed wares. It was not until the late 1820s that the greater palette of printed colors became technologically available—with a bursting onto the market.[14] As the ceramic historian Jewitt noted, the appearance of vivid new printed wares appeared in the late 1820s. The ceramic assemblage from the Jones/Hillerman Site also bespeaks of the mixing of color on the same printed vessel—and that there is an effort to combine multiple colors in not only the painted wares but also the printed wares. At the Jones/Hillerman Site (as elsewhere during this period), several vessels incorporating a two-color printed pattern appear. At some contemporary sites (such as the Gifford Site in rural Peoria County, Illinois; see Mansberger, Yingst and Stratton 2006), clobbered wares combining printing with colorful over glaze painted highlights also appear at this time. At the Gifford Site, it appears that the occupants of this site may have been taking this fancy aesthetic one step further by purchasing sets of dinnerware that had individual pieces printed with the same pattern—but in different colors. Such may also have occurred at the Jones/Hillerman Site, but with the use of the edge-decorated wares—which appear in red, green, and blue. As Furniss, Wagner and Wagner (1999:102) have noted, "In 1989 George Miller noted seeing a set of four Adams' Palestine plates, each a different color and one in itself four color. He suggests they were sold as 'harlequin sets'." Would not a table set with two-color cups and each table setting a different color not reflect the height of the fancy aesthetic? Regarding the demise of the fancy aesthetic, Priddy (2004:99) noted that "despite the fervor, the Panic of 1837 and the devastating financial depression that followed seriously undermined the ebullience of the previous decades, and caused substantive changes in the national mood."[15] With the 1840s, Americans turned their attention to a different kind of world and an entirely new aesthetic"—and at about the same time, the Jones/Hillerman Site was abandoned.

Appendices III and IV document the variety of refined ceramic and glass vessels forms recovered from the Jones/Hillerman Site. Table 4 summarizes these vessels. A total of 118 ceramic and glass vessels were documented at this site. Tablewares comprised slightly over 30% of the vessels recovered from this site. Of these, the vast majority were plates (n-16) and small plates (n=14). A single example of each of a large pitcher, platter, serving vessel, glass tumbler, and an indeterminate vessel (potentially a salt) were recovered. Glass tablewares were poorly represented in this assemblage. Over 48% of the vessels were represented by teawares—which consisted of the remains of 56 cups and saucers. A single fragment of a teapot or sugar bowl lid was also present. Reflecting a cup to plate ratio of 183:100, teawares are well represented in the Jones/Hillerman Site artifact assemblage. The majority of the cups appear to have been of the London Urn form. The cups in this assemblage were predominately of the London-urn shape, although paneled varieties were also present. The flow blue decorated teawares (cups) were paneled and typical of the "Gothic Shape" common during the 1840s.

As noted above, ceramic wares from the British firms of William Adams (Vessels 38), Enoch Wood and Sons (Vessels 27 and 40), and William Davenport (Vessels 5 and 62) were all recovered from this site. Additionally, two undecorated body sherds with an impressed mark

[14] Priddy (2004:97) associates the success and rapid spread of the newly developed kaleidoscope during the late 1810s and early 1820s to the fancy aesthetic popular at the time.

[15] Priddy (2004:99) also equates the realism of photography—which was introduced in 1839—to the decline of the fancy aesthetic, which "now seemed amateurish by comparison, and woefully out of place."

that read "HENDERSON & GAINES / 45 / CANAL ST / NEW ORLEANS" (Lots 2 and 29) were also recovered from this site. These two sherds were found on the surface (Lot 2) and within Feature 5 (Lot 29). One of these Henderson and Gaines sherds also had an impressed DAVENPORT anchor mark with a partially intact date mark indicating manufacture of a vessel sometime in the 1830s. Kowalsky and Kowalsky (1999:659) indicates that this New Orleans import house was in operation from 1836-1866, and marketed wares manufactured by William Davenport and Company. Although this firm was importing wares through the 1860s, the firm had its greatest impact in Illinois during the early years of its existence. With the rise of St. Louis, the influence of the New Orleans merchants quickly subsided. Similar marks are commonly found at sites in the greater southern Illinois region (such as the urban center of Hutsonville, were multiple marks were recovered; Phillippe pers. Comm.. 2009).

Table 4

Ceramic and Glass Vessels by Functional Category

	Number of Vessels	Percentage of Total
Tableware	36	30.5%
Teaware	57	48.3%
Kitchenware	5	4.2%
Food Storage (Commercial)	1	0.8%
Food Storage (Domestic)	5	4.2%
Alcoholica Beverage	4	3.4%
Medicine	2	1.7%
Medicine/Chemical	3	2.5%
Toiletware/Hygiene	2	1.7%
Lighting	1	0.8%
Indeterminate	2	1.7%
Total	118	100.0%

Non-ceramic tablewares recovered from the Jones/Hillerman Site were relatively low in number, but did include several table knives and teaspoon fragments (Figures 58-59). It is interesting to note that none of the identified tableware (particularly spoons) were pewter, but were represented by plated metal examples. The table knives were all bone-handled, but included both flat tanged and rat-tail tanged varieties. A large serving fork with rat-tail tanged antler handle was also present in the assemblage. Glass tumblers were few in number, but included one press-molded fluted example. Additionally, a metal shaker lid from a potential castor or shaker bottle was also recovered. A folded neck with applied string decoration around the bottle's neck may represent the remains of a similar small cruet or castor (or a small decanter).

An unusual clear (presumably lead) glass sherd with white glass strips incorporated into its design, represents the remains of an unidentified potentially tableware vessel (Figure 62).

This small fragment of tubular lead glass has a hollow core and white glass stripes incorporated into the clear lead glass. This type of glasswork is simply referred to as "striped glass" and is a very unusual item for this assemblage. This sherd originated from what appears to have been a free-blown glass item, potentially representing the re-working of latticinio (stripped glass) rods.[16] Unfortunately, the small size of the sherd makes a determination of the vessel shape impossible. The hollow, tubular character of the item suggests that it may represent either a stem or applied handle to a vessel—such as a stem of an oil lamp, or the handle of a small cream pitcher. Similarly, it is also possible that this may represent a small fragment of a whimsical item, or even a glass ceremonial cane or pipe.

Foodways Preparation and Storage. Artifacts associated with this functional category generally are coarse earthenware or stoneware containers (such as crockery jars, churns, jugs, and milk pans). Generally, yellowwares (such as large mixing bowls and pitchers) also are included in this category. Artifacts from this category comprised only 2.4% of the total collected from the Jones/Hillerman Site, and consisted of only 65 sherds and 11 vessels. The Kitchenware and Food Storage (Domestic) vessels items each accounted for 4.2% of the ceramic and glass vessels from this site. Table 5 summarizes the crockery from this site.

Redware (a lead glazed, red-paste earthenware) is a common utilitarian ware used by Illinois settlers, whether urban or rural. Although redware tablewares (plates, mugs, small bowls) often were used by early settlers, the majority of the redware associated with the Illinois frontier consisted of large milk pans, bowls, jugs and jars typically associated with food preparation and storage.[17] By the early 1830s, redware was being produced in the central Sangamon Valley (including Springfield), the American Bottom, and the Wabash Valley. By the early 1840s, redware was also being produced at multiple production centers in Jo Daviess County and within several western Illinois locations (Mansberger 1994). Redware consisted of approximately 14% of the sherd count and 27% of the vessel count in this functional category. The vessels were represented by small jars and/or bowls.

Salt glazed stoneware is a more durable, vitrified ware that was used for a variety of purposes during the early nineteenth century. In Illinois in 1832, stoneware production was limited to non-existent. It was in that year, that John Neff Ebey was credited with producing the first stoneware in the state. Originally producing redwares in Sangamon County, he experimented with western Illinois clays and began stoneware produced in Greene County in 1832 (Mansberger 1995, 2001; Madden 1974). During the late 1820s, stoneware containers were clearly a non-Illinois product that was being imported from more eastern manufactories (such as those in southwestern Indiana or southern Ohio). Stoneware comprised nearly 31% of the sherd count and 36% of the vessels from the Jones/Hillerman Site. The four stoneware vessels

[16] Barlow and Kaiser (1987:252) illustrate latticinio rods used by Nicholas Lutz of the Boston and Sandwich Glass Company during the later nineteenth century (circa 1888-1892). The rods were used by Lutz to manufacture writing pens and were imported from France. Barlow and Kaiser (1987:250-252) illustrate several striped glass vessels (small cream pitcher, tumbler, and kerosene lamp font) manufactured by the Boston and Sandwich Glass Company during the 1870-1887 period. Latticinio rods were widely used for cane work and the manufacture of paper weights.

[17] Although it is known that redware tablewares were being manufactured at Nauvoo as well as in the Sangamon Valley (at the Ebey/Brunk Pottery Site), they are seldom found on habitation sites in Illinois that post-date 1830. In an archaeological assemblage, redware tablewares have been found in very limited amounts at the Bridges Site (Halpin 1995).

consisted of two jugs (Vessels 7 and 58), a jar or crock (Vessel 114), and a shouldered jar (Vessel 8).

At the Jones/Hillerman Site, the redware to stoneware ratio was approximately 45:100 based on sherd count and 75:100 based on vessel count. This ratio seems fairly consistent for a site of this period in Illinois.

Table 5

Crockery from the Jones/Hillerman Site

	Sherd Count		Vessel Count	
earthenware				
red-paste (clear-glazed)	9		3	
	9	13.85%	3	27.27%
stoneware				
salt-glazed	20		4	
	20	30.77%	4	36.36%
yellowware				
Rockingham-glazed	10		2	
undecorated	26		2	
	36	55.38%	4	36.36%
Grand Total	65		11	

Yellowwares are yellow or buff paste earthenware with a clear, generally lead, glaze. Often the wares are decorated with a mottled dark glaze referred to as a "Rockhingham" glaze. These wares usually occur in the form of utilitarian kitchen and personal items such as mixing bowls, pie plates, nappies, pitchers, and chamber pots. The yellowwares from this site were fairly numerous, representing over 55% of the sherd count and 36% of the vessel count of the crockery. The four vessels from this site included two Rockingham-glazed vessels, and two undecorated vessels. The two Rockingham-glazed vessels consisted of a small round pitcher (Vessel 56) and an indeterminate vessel (Vessel 89). The two undecorated vessels included a small serving bowl or baker (Vessel 18) and a small handled jug (Vessel 75).

The small serving bowl or baker (Vessel 18) was a molded polygonal (probably octagonal) container with an everted rim. Of particular interest was the fact that this bowl appears to have had an impressed backstamp that read "[BENNETT BRO]THERS / [LIVERPOO]L OHIO." Initial yellowware production began in East Liverpool, Ohio (Muskingum County) as early as 1839 (Gates and Ormerod 1982:3-4). By the mid-nineteenth century, production of yellowwares in this eastern Ohio community were so extensive that this common yellowware product became known as "Ohio Liverpool Ware" (Liebowitz 1985:39).[18]

[18] The first documented production of yellowware in the Ohio Valley occurred in Pittsburgh in 1827. At that time, the firm of Vodrey and Frost constructed a pottery in Pittsburgh and produced yellowwares for approximately three

Apparently, the first potter documented in East Liverpool was James Bennett, who arrived from South Derbyshire (England) in Jersey City, New Jersey in 1834 where he worked for the American Pottery Company. In 1837, he relocated to Troy, Indiana to work with James Clews (at his Indiana Pottery Company) in an attempt to produce refined whitewares at this southern Indiana community (which was located along the banks of the Ohio River). In "about a year" (sometime in 1839), with the failure of this attempt, the 28-year-old Bennett—who was suffering from ill health—worked his way up the Ohio river to inspect clays discovered at East Liverpool. Bennett soon established a pottery in East Liverpool during the later part of 1839, and apparently fired his first wares during early 1840. According to Ramsay (1939:74), Bennett's first kiln of ware which was fired in early 1840 consisted mostly of yellowware mugs. In 1841, James returned to England and persuaded his three brothers to return to East Liverpool and join him in his endeavors in the pottery industry. It was during that year that the four brothers (James, Edwin, Daniel, and William) established the Bennett Brothers Pottery, and began producing a range of Rockingham-glazed wares and common yellow earthenware. "Bennett's Liverpool Ware" was being advertised in the Pittsburgh papers as early as 1841 and was being marketed in such communities as Cleveland, Cincinnati, Louisville, and St. Louis in very short time frame.[19] According to Ramsay (1939:74), "the real pioneer of the industry was James Bennett…"

As Liebowitz (1985:39) notes, this firm was "short-lived in Ohio" and operated from this East Liverpool location from 1841 to 1844. In 1844, in order to improve their transportation facilities, the brothers relocated their pottery to the Pennsylvania community of Birmingham, which was located immediately across the Monongahela River from Pittsburgh—and today a part of that community. During these early years of production in Ohio, the firm apparently used only one mark—identical to the impressed mark recovered from the Jones/Hillerman Site. This early, impressed mark, which consists of the two lines of text "Bennett Brothers / Liverpool, Ohio" surrounded by a simple oval, is presented in Gates and Ormerod (1982:15, Figure 5b).

Apparently, the Bennett's technical competency for pottery production was good during these early years, and in 1845 (shortly after moving to Birmingham) their firm was awarded a prize by the Franklin Institute for their Rockingham-glazed wares. The Franklin Institute noted that their "… jugs, mugs, and spittoons are decidedly better than the English Rockingham ware…" (as cited in Gates and Ormerod 1982:15; see also Stefano 1976:24). Ramsay (1939:214) also notes that the Bennett Brothers produced "some poor Flint Enamel, paneled pitchers in this and Rockingham" ware from their East Liverpool location.

Documented pieces of Bennett's yellowware from this period are few in number. Liebowitz (1985:39) illustrates an octagonal platter with the firm's impressed mark. Archival evidence suggests that the firm was known for their spittoons and mugs. It is reasonable to suspect that the yellowware jug and Rockingham-glazed pitcher—as well as this small serving bowl—were also potentially manufactured by the Bennett Brothers Pottery of East Liverpool [see also Claney (2004:57-58), Barber (1893) and Goldberg (2003).]

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years. In about 1830, they relocated to Louisville, where they assisted with the production of yellowware at a local pottery in that community (Ramsay 1939:74). Ramsay (1939:74) also notes that "this city of East Liverpool produced the great bulk of the yellow-ware and Rockingham, particularly of the simpler types, made in the Unites States between 1840 and 1900."

[19] As Gates and Ormerod (1982:7) note, during this 1840s period, yellowware and Rockingham wares "were grouped under the term 'Liverpool' ware, and the trade name 'Queensware'…."

Non-ceramic artifacts from the Foodways Preparation and Storage category were few in number from the Jones/Hillerman Site. Nonetheless, two fragments of a cast iron Dutch oven lid were recovered from the site and suggest the presence of a cooking fireplace. Similarly, at least one of the redware vessels had a scorched base, also suggesting the presence of a cooking fireplace. A large iron tablespoon also falls within this category.

Foodway Remains. The partial reconstruction of a site's past occupants can be deduced from both bone (faunal) and seed (floral) remains recovered from that site.[20] Faunal preservation was excellent at the Jones/Hillerman Site. As a result, over 27% of the artifacts from this site were from this functional category. Unfortunately, although the faunal remains from this site were fairly well preserved, much of the faunal material was burned and/or calcined making identification difficult. Faunal remains were identified by Dr. Terrance Martin, Illinois State Museum (see attached Appendix VI). Besides bone, eggshell and floral materials (such as peach pits) were also identified at this site.

The faunal remains from the Jones/Hillerman Site were represented by an interesting mix of both domestic and wild animal species. Both the greatest number of individual specimens (NISP) and minimum number of individuals (MNI) was represented by swine or pork remains. A total of 112 identified specimens from four hogs were represented in the recovered faunal assemblage. The only other domestic mammal represented at this site was cattle, which was represented by only five specimens from a total of two individuals. Non-domestic mammals represented in the assemblage included white-tailed deer (41 specimens from 2 individuals), opossum (2 specimens from a single individual), Eastern cottontail rabbit (one specimen from one individual), Eastern gray squirrel (two specimens from one individual), and raccoon (14 specimens from two individuals). Clearly the white-tailed deer represented food remains. The remains of the small mammals (opossum, raccoon, rabbit, and squirrel) may also represent food remains associated with the site occupants.

Comparing relative importance of various animal remains to the diet is difficult, and can be compared in a variety of means—including 1) number of individual specimens, 2) minimum number of individuals, and 3) biomass represented by either a) the individual cuts recovered from the site, or b) from the minimum number of animals presumably consumed at the site. For an urban component, the biomass of the individual cuts of meat recovered from a site probably makes more sense in regards to comparative discussions—unless evidence for on-site butchering and processing can be documented. In contrast, in a rural setting where the entire animal is butchered, processed, and consumed, determining the biomass from individual cuts recovered from the site probably under-represents the importance of large mammal remains such as beeves. Since it is believed that the entire carcass of such an animal is consumed on-site, then the biomass of the entire animal should be considered. This argument does not take into consideration the potential use of fresh meat in bartering, or in the sharing of fresh meat resources during butchering time. Based on the faunal analysis, it would appear that the inhabitants of the Jones/Hillerman Site consumed four hogs to every two beeves to every one deer. Although based on the number of individual specimens recovered, and in terms of biomass

[20] Flotation is a water-sorting process for recovering very small artifacts from feature contexts. A small sample of the feature fill (consisting of soil removed from the feature) is taken to the laboratory where it is immersed in water. After a short time, the lighter materials (such as charcoal) float to the surface where they are removed and later analyzed. Once this has been completed, the remaining soil is forced through a fine mesh screen leaving a wide variety of natural and cultural material behind (often including small beads, bone fragments, seeds, and other items). It is through the flotation process that floral remains are generally recovered.

based on the number of individuals specimens recovered (actual cuts of meet recovered), the swine remains seem overly well represented at this site. But when one compares biomass based on the entire animal (which probably occurred at rural sites such as the Jones/Hillerman Site), the importance of beef to the site inhabitants seems much more significant. If one considers consumption of entire animals, beef comprised slightly over 44% of the biomass, whereas hogs comprised slightly over 48% of the biomass presumably consumed.

Fowl remains from the Jones/Hillerman Site were represented by a fairly small number of bird bone (n=18) and eggshell (n=52). The bird bone recovered from the site included four chicken bones (representing two separate birds) and a single turkey bone (representing a single turkey). Although it is not known if the turkey was a wild or domestic animal, it is assumed that it was domestic. A single fragment of a potential quail or partridge was also found. Fish were also represented, albeit in fairly low number, from the Jones/Hillerman Site. Both unidentified catfish and flathead catfish were each represented by a single element, and suggest fishing within the nearby Ohio River—as the adjacent stream was probably too small to support catfish.

Cranial elements, teeth, and feet remains comprise a fairly large percentage of the hog remains recovered from this site, suggesting that hogs were probably butchered and processed on site. Similarly, although the number of specimens is extremely low, cattle were also represented by teeth and feet, as well as vertebrae and proximal forequarter (a distal shaft of a humerus) remains. As such, it would appear that beef were also butchered and processed on site. The lumbar vertebrae and humerus both represent quality cuts of meat. Only one of the fragments of beef showed any evidence of butchering marks, and that was the distal shaft of the humerus, which exhibited evidence of having been chopped, and not sawn. This practice is consistent with rural occupations and the on-site processing (and consumption) of entire domestic animals—and contrasts with more urban markets where individual meat cuts may have been purchased for larger animals, particularly beeves. Although the sample size for the beef remains was small, the one element that exhibited the butchering marks was from a subadult, and suggests the on-site processing of younger feeder cattle (and not the processing of older stock such as the family's milch cow that had outlived her usefulness).

The non-domestic large mammals present consisted solely of a white-tail deer. Deer remains were represented by a fairly large sample of antler, and lesser amounts of cranial elements, foot bones, vertebrae, and proximal forequarter. Although the common belief is that deer were generally field processed with only the better quality meats being brought home, this assemblage of deer bone would suggest that at least one (if not more) individuals were processed and consumed on site. The large number of deer antler was represented by a single antler rack, which may have been saved for use of handle manufacture.

Personal. These artifacts represent a wide range of items used by the individual for his/her personal care, gratification, and/or leisure activity. Artifacts from the Personal Category were fairly low in number from the Jones/Hillerman Site, comprising approximately 4.7% of the artifacts recovered from the site. The artifacts from the Jones/Hillerman Site from this category included toys (porcelain doll leg, stoneware marble), glass containers (such as medicine and/or liquor bottles), hygiene related items (such as bone lice comb), as well as smoking pipes, spectacle frames and lens, watch chain fob, glass beads and/or jewelry.

During this earlier pre-modern period, glass containers are generally poorly represented in artifact assemblages from this time period, and those that are present are generally associated

with a non-food use. Glass containers in use at this time include medicine vials, liquor bottles, and the occasional scent bottle—all items generally associated with the Personal Functional Group. At the Jones/Hillerman Site, the glass containers were few in number and included aqua medicine vials, dark green/black glass wine bottles, and a potential lead glass decanter.

One of the wine bottles recovered from the Jones/Hillerman Site had an impressed seal on its shoulder of the bottle that was impressed "DE LUZE & DUMAS / BORDEAUX." Alfred and Louis-Phillippe de Luze, although born in Frankfurt/Main (Germany), were of French descent and apparently grew up in Switzerland. In 1817, at a time when both of the brothers were in their early 20s, they immigrated to New York City. Realizing a market for "Old World" goods in America, Louis Phillippe soon established the importing business of L-P de Luze and Company, with Alfred returning to Europe to act as a purchasing agent. On the advise of their Frankfurt banker uncle, Alfred soon settled in Bordeaux. While in Bordeaux, to assist with his wine importing business, Alfred established a partnership in 1820 with an individual by the name of Dumas. The firm was known as "A. de Luze and Dumas." The partnership was short-lived, and two years later (in circa 1822-23) it was dissolved. At that time, a new partnership was established by de Luze known as "A. de Luze and Fils"—a company that apparently is still present in the region today. At about that same time (1824), the firm decided to specialize only in Bordeaux and Burgundy wines and cognac. Although Alfred's brother's importing business in New York City was of utmost importance, Alfred's wine exporting business flourished, and he soon had offices in Russia, Poland, Scandinavia, England, India, and later in Egypt (ecoctail—glossary 2008).[21] It is interesting to speculate that not only was the one bottle of Burgundy or Bordeaux wine imported, but if it was drank in circa 1840-45, it would have been a well-aged, nearly 20 to 25-year-old bottle of liquor by that date. The other option is that it was a re-used bottle.

Although liquor containers were poorly represented from the Jones/Hillerman assemblage, they suggest a relatively atypical frontier assemblage that consisted of wine bottles and a potential glass decanter (which would have functioned as a dispenser for relatively upscale distilled liquors, such as brandy or whiskey). Whiskey flasks—which generally suggest individual drinking patterns--were absent from the assemblage. In contrast, a potential decanter—which reflects more upscale social drinking habits—was present.

Additionally, artifacts associated with tobacco smoking were recovered from the Jones/Hillerman Site in very small numbers. Smoking related artifacts included kaolin pipe stems and pipe bowls. Toys were also present at the site in very small numbers, and included stoneware marbles and doll parts. The single doll part consisted of a painted porcelain doll leg. Additionally, a fragment of a potential harmonica reed plate was also recovered. Artifacts associated with personal hygiene were few in number from this site, but did include fragments of a single bone lice comb. Lacking within the assemblage were bone toothbrushes (such as those recovered from the Gifford Site).

Another rather unique items associated with the Personal Category that was recovered from the Jones/Hillerman Site include the remains of brass folding spectacles or reading glasses. Fragments of both the glass lens and brass frame were recovered. These eyeglasses are known as "turn-pin temple spectacles." Turn-pin temple spectacles were manufactured from the later

[21] Although Alfred died in 1880, his family continued with the business. In 1983, the firm was purchased by Remy Martin (ecoctail—glossary 2008).

eighteenth century throughout the nineteenth century. Early examples were hand made, generally by a jeweler. In 1833, machinery apparently was developed for mass-producing these glasses, at which time they became more common. The example from the Jones/Hillerman Site appears to have been hand made with short tear-drop ends typical of the pre-1860s eyeglasses—all of which suggests that they easily date to the period circa 1835-45. Such spectacles were often fairly expensive, hand-made items associated with professional and merchant glass families (http://www.eyeglasseswarehouse.com/turn-pin.html). These glasses potentially suggest the presence of a literate individual—potentially someone from a merchant or professional class.

Clothing. Except for buttons and an occasional fragment of shoe leather, items from the Clothing functional category are seldom preserved at archaeological sites. The artifacts from the Jones/Hillerman Site were no exception, as only 1.8% of the artifacts from this site were assigned to this functional category. Artifacts from this category at the Jones/Hillerman Site consisted predominately of buttons (n=31), and an occasional fragment of shoe leather.

The buttons from the Jones/Hillerman Site were represented by both loop shank (n=11) and sew-through (n=20) varieties. The loop shank buttons were predominately flat brass examples. One of the brass loop shank buttons had a concave head.

The majority of the sew-through buttons were manufactured of bone (n=11) and included one-hole (n=1), 4-hole (n=2), and 5-hole (n=8) varieties. The one-hole bone button probably represents a fabric-covered button. Four-hole shell sew-through buttons (n=6), many of which were decorated, were also relatively common. A single example of a "modern" Prosser (often referred to as "milk glass") sew-through button was present (Sprague 2002). These buttons were developed in 1840 and appear almost immediately within the archaeological record shortly thereafter. The low number of Prosser buttons at the Jones/Hillerman Site argues for an abandonment date during the early to middle 1840s.

Several of the brass loop shank buttons had impressed marks on their reverse side. These include examples marked "TRIPLE GILT / COLOUR," "RICH GOLD COLOUR," "IMPERIAL STANDARD," "ORANGE COLOUR," and "RICH COLOUR." All of these marks are common on early to middle nineteenth century buttons, and unfortunately are of little use for dating this assemblage. Nonetheless, they do attest to the better quality of brass loop shank buttons potentially present at this site. In contrast, one iron 4-hole sew-through button recovered from Feature 3 was impressed with the name "SHEPHARDSON & RICHARDS." Little is known about this button manufacturer. Similar buttons have been recovered at the Donner Pass and associated with the Donner party (Hardesty 2006:93). According to Hardesty (2006:93), these buttons were made as early as 1835. Otherwise, one source notes that a George W. Shepardson was "at work [in Wrentham, Massachusetts] prior to the year 1843" and apparently employed 15-20 workers producing $8-10,000 worth of goods—which apparently was "chiefly buttons for vests and pantaloons." Shepardson was "succeeded by H. M. Richards, Esq., of Attleborough, on March, 1843" who apparently operated the mill for about one year, after which it was again taken over by Mr. Shepardson, who "did not occupy it long, and eventually removed to Providence, R.I. (http://home.comcast.net/~coawrentham/norfolk.htm). It seems logical to assume that these are the two individuals indicated on the stamped button, and although it is not known as to when they may have collaborated and produced a stamped button such as that found at the Jones/Hillerman Site, it seems logical to suspect that they were produced for a short time during the mid-1840s (circa 1843-44?).

The buttons at the Jones/Hillerman Site are represented by a relatively high number of buttons associated with more upscale clothing (and include the brass loop shank, 1-hole bone, and decorated shell buttons). The brass to bone button ratio at the Jones/Hillerman Site is approximately 91:100 ratio (which is comparable to the 118:100 at the Gifford Site). The relatively high percentage of the upscale buttons may attest to the higher socio-economic status of these to sites' occupants.

Table 6

Buttons from the Jones/Hillerman Site

Button Type	Number		
bone (sew through)			
5-hole	8		
4-hole	2		
1-hole	1		
		11	35.48%
brass (loop shank)			
flat	9		
concave	1		
		10	32.26%
iron (loop shank)			
flat	1		
		1	3.23%
iron (sew through)			
4-hole	2		
		2	6.45%
milk glass (sew through)			
4-hole	1		
		1	3.23%
shell (sew through)			
4-hole	6		
		6	19.35%
Grand Total		31	

Household/Furnishings. Artifacts from this category represent the remains of household furnishing such as furniture and other related items. Sites occupied during the early to middle nineteenth century seldom have many artifacts from this functional group. This category represented only 0.2% of the artifacts from the Jones/Hillerman Site (n=7). Artifacts from this category included a potential chimney glass fragment, a brass screw from a potential unidentified household item, ceramic sherds associated with chamber pots, and a couple of machine cut tacks potentially associated with upholstered furniture and/or decorative tack work.

Architecture. This functional category consists of artifacts that were once part of the fabric of a building and includes such items as brick, stone, nails, and window glass. The artifact assemblage from the Jones/Hillerman Site consisted of 413 artifacts from this functional category—which comprising 13.4% of all the artifacts recovered from the site.

Nails comprised the vast majority of the artifacts from this functional category. A total of 189 machine cut nails and two forged nails were identified from the assemblage. The identified nails appear to fall predominately into two size categories. The larger nails, many of which

exhibit evidence of having been burned, were approximately 2 /14" to 2 3/8" in length and probably represent small framing nails. The smaller class of nails were approximately 1 3/8" to 1½" in length. Historically, these small sized nails were used for either attaching shingles to a roof, or lath to a wall (for plaster). As no evidence of plaster was found within this assemblage, it seems reasonable to suspect that these were roofing nails. The larger framing nails may have been used for light framing of doors, windows, and other interior trim. One machine cut nail had an unusual cast (?) gray-metal head (lead or zinc alloy?). Although this nail is reminiscent of marine nails used in boat construction, its function is unknown.

Window glass, although present in this assemblage, was present in very limited quantity. Only 32 sherds of window glass were present at the Jones/Hillerman Site. All window glass was aqua in color, relatively thin, and recovered in very small, fragmentary pieces. The limited amount of window glass from this site suggests that although windows with glazed sash may have been present in this structure, they were present in very limited in number. As such, it is very possible that a single sash window was present in this structure.

Soft mud brick fragments and/or daub fragments were present in fairly large numbers—albeit in very small sizes—from the Jones/Hillerman Site. Many of these small fragments exhibited evidence of burning. Few of these small fragments exhibited square corners or edges typical of a formed brick. As such, it is suspected that the majority of these "brick" fragments may represent daub from a "mud and stick" chimney and fireplace, and/or chinking applied to the interstices between the logs of a log structure. Construction stone was poorly documented at the Jones/Hillerman Site. Other than a couple of large, non-quarried stones present near the surface of Feature 7, construction stone was absent from the site. Although a fragment of tabular sandstone polished on one surface from Feature 5 was initially believed to represent remnants of a stone hearth, a re-examination of the wear pattern on this stone strongly suggests that it represent a whetstone for sharpening cutting tools. Interior plaster and/or mortar were not present at this site. Similarly, architectural hardware was poorly represented from the assemblage.

Labor/Activities. Artifacts recovered from the Jones/Hillerman Site document a variety of specialized activities that were conducted by the inhabitants of the site. At the Jones/Hillerman Site, the Labor/Activities functional category is represented by 9.3% of the artifacts recovered from the site. The following discussion attempts to summarize the variety of non-household related labor activities undertaken at this site—many of which were determined from artifacts from the other functional categories. Generalized household activities were obviously undertaken—such as food and liquor preparation and consumption at this site, and these artifacts were summarized in discussions of previous functional categories.

Writing slates were found and suggest the presence of a literate individual (e.g., a merchant) and/or educational activities. Writing appears to have been undertaken by the occupants of the site, as both slate writing tablet fragments (n=2) and slate writing pencils (n=1) were recovered. These may have been associated with the education of children or used by adult occupants for mathematical calculations. Similarly, the presence of a pair of reading glasses or spectacles re-enforce this interpretation of a literate family member.

Sewing activities were also fairly well represented at the Jones/Hillerman Site. Sewing is an activity associated with the manufacture of new clothing, as well as the maintenance of older apparel. Several iron needles, numerous straight pins, two thimbles, and a pair of scissors all

suggest that sewing activities were undertaken by the site occupants. The straight pins all had the distinctive globular heads typical of dipped heads of the period.[22] Thimbles were both of the "capped" and "open top" varieties (Noel Hume 1970:256; Hoelle 1983). The scissors from the site were small and fragmentary. Although these artifacts potentially suggest the presence of females at this site, one should not jump to this conclusion, as sewing was often undertaken by males also.

Hunting and/or arms-related activities were undertaken at the Jones/Hillerman Site. Artifacts associated with firearms were relatively uncommon, but did include two gunflints, as well as a single percussion cap. Both gunflints were small in size and of the blade variety. One of the gunflints was relatively unused and of a dark gray to black color typical of British flints. This gunflint measured 19.8mm by 17.0mm in size and was 5.9mm thick. The other gunflint was of a light color, presumably from having been burned. Besides being burned, this light colored flint exhibited extensive evidence of use and/or re-working (both on its striking surface as well as on the sides). It measured approximately 22.5mm by 20.5mm in size and was 7.0mm thick. Both flints exhibited their long dimension across the width of the blade and exhibited the typical "demi-cone of percussion" associated with the snapping of the blades into the gunflint. The dark color of the one gunflint, and the method of snapping the blades suggests that these two gunflints were of British manufacture, which "were prominent durig the period 1780 to the 1820's" (Smith 1993:271). These two gunflints document the presence of flintlock guns. Similarly, more modern percussion cap firearms appear to have been in use at the site, as indicated by the presence of a single copper percussion cap from one of the features. Also recovered from the site were two lead balls and a small fragment of melted lead. The two musket balls were of a small diameter (or caliber), both measuring approximately 0.40" to 0.42" in diameter. One of the balls clearly exhibited evidence of having been cast in a mold. This lead ball had an impact scar on one side and was slightly ovoid in shape. The second ball was heavily deformed and "chewed" up. Both lead balls appear to represent bullets that had been fired ("spent" ammunition). Also, as noted during the discussion of the Foodways Remains Functional Category, potential fishing activities were also documented by the presence of fish within the faunal remains. The fish present (catfish) suggest fishing in the main or side channels of the adjacent Ohio River.

It is interesting to note that both of the gunflints, as well as the percussion cap and the lead balls, were of a small size—potentially indicative of small rifles or even handguns, and not large caliber rifles (or shotguns). As Smith (1993:269) noted, "the earlier French flints were comparatively wide, suited to contemporary military muskets. After the Revolutionary War, smaller rifles and pistols became popular, and consequently, the later French gunflints were smaller." Although Smith (1993) noted the fact that French blade gunflints from Fort Southwest Point clustered into two size categories (large and small) based on the gunflint's blade width, he did not notice a similar size clustering with the British blade gunflints. The gunflints at the Jones/Hillerman Site clearly fall within the small size cluster of the French blade gunflints. As such, this may suggest the use of smaller rifles as well as the use of pistols for personal protection (i.e. side arms), as opposed to hunting.

[22] Prior to 1824, the straight pin head was formed by wrapping around the pin shaft and flattened by a blow of the hammer. This head was often "dipped" or plated with tin to form a rather round head. Machinery was developed in 1824 to manufacture a solid, stamped head that consisted of a section of flattened shaft (Noel Hume 1970:254).

Agricultural activities and/or animal husbandry activities are seldom represented in the archaeological record at sites from this time period. Recovered from Feature 2 was a large iron cowbell. Such bells were often attached to the neck of a milch cow (or to the dominate cow within a small herd—known as the "bell cow") that was allowed to forage in the prairie lands and/or pasture lands surrounding an early farmstead. Such bells assisted the farmer in locating the cow or herd. With the advent of more formal fencing and/or feedlots, the use of cowbells declined. The presence of this cowbell attests to the potential open land grazing associated with a farmer's milk cow or a small herd of dairy cows.[23] Artifacts associated with beasts of burden and/or devices pulled by draft animals (i.e. buggies, wagons, and/or agricultural implements) were also present. These items included an iron stirrup, an iron horse shoe, harness buckles, and a singletree hook were also recovered. The stirrup and horseshoe definitely alludes to the presence of a riding horse, as opposed to a draft animal. Additionally, the presence of an ax suggests the chopping of wood for fuel. A whetstone suggests the maintenance of cutting utensils and potentially woodworking tools.

Indeterminate. Many of the artifacts recovered from the Jones/Hillerman Site were so fragmentary or generic in character that assigning them to a specific functional category was impossible. A total of 38 artifacts, comprising approximately 1.2% of the total from the site, were assigned to this category. The functions of some of the items relegated to this functional category are obvious (e.g., the prehistoric artifacts not associated with the historic occupation).

[23] The following web page contains information on the use of cowbells in more recent times (http://hillcountryofmonroecountry.blogspot.com/2007/09/bell-cow-natural-leader-in-hill-country.html).

Figure 43. The edge decorated wares, which came in blue, red, and green colors, consisted of a variety of plates and at least one octagonal platter. The red colored edge decorated wares, which are relatively rare in archaeological assemblages, was represented by at least two vessels (both plates). All artifacts are actual size.

Figure 44. Also recovered from these features were several vessels with a minimally decorated blue edge or painted band. These decorative treatments wares can often occur on creamware and pearlware vessels and date to the late eighteenth and early nineteenth centuries. These examples occurred on transitional pearlwares/whitewares and probably date from the 1830s. Actual size.

Figure 45. Although annular decorated wares were very uncommon in this assemblage, they were represented by this nearly complete London-urn shaped waster bowl from Feature 2.

Figure 46. Painted wares were also common in the assemblage. Monochrome blue painted wares (top) were present at the Jones/Hillerman Site in relatively small numbers. More common were polychrome painted (small floral or "sprig") wares (bottom). The majority of the painted wares appear to have been teawares. Actual size.

Figure 47. Although most of the small floral patterns were unidentified, one painted pattern was identified within this assemblage. A single saucer (Vessel 90; left) was decorated with the CORNFLOWER motif—which had its origins in late eighteenth century French culture and was introduced to American tastes predominately through Thomas Jefferson and his French connections. The example at right is a detail of the whole pattern from a vessel recovered from the Gifford Site, rural Peoria, Illinois (Mansberger, Yingst, and Stratton 2006).

Figure 48. Large floral polychrome painted wares were also present in small numbers. These wares are decorated in a stylized Adams Rose pattern.

Figure 49. At least one London-urn shaped cup and saucer were decorated in an earth tone palette (yellow and ocher colors). This saucer had an impressed "ADAMS" mark on its reverse side. These generally represent pre-1830s wares. Reproduced at 75% actual size.

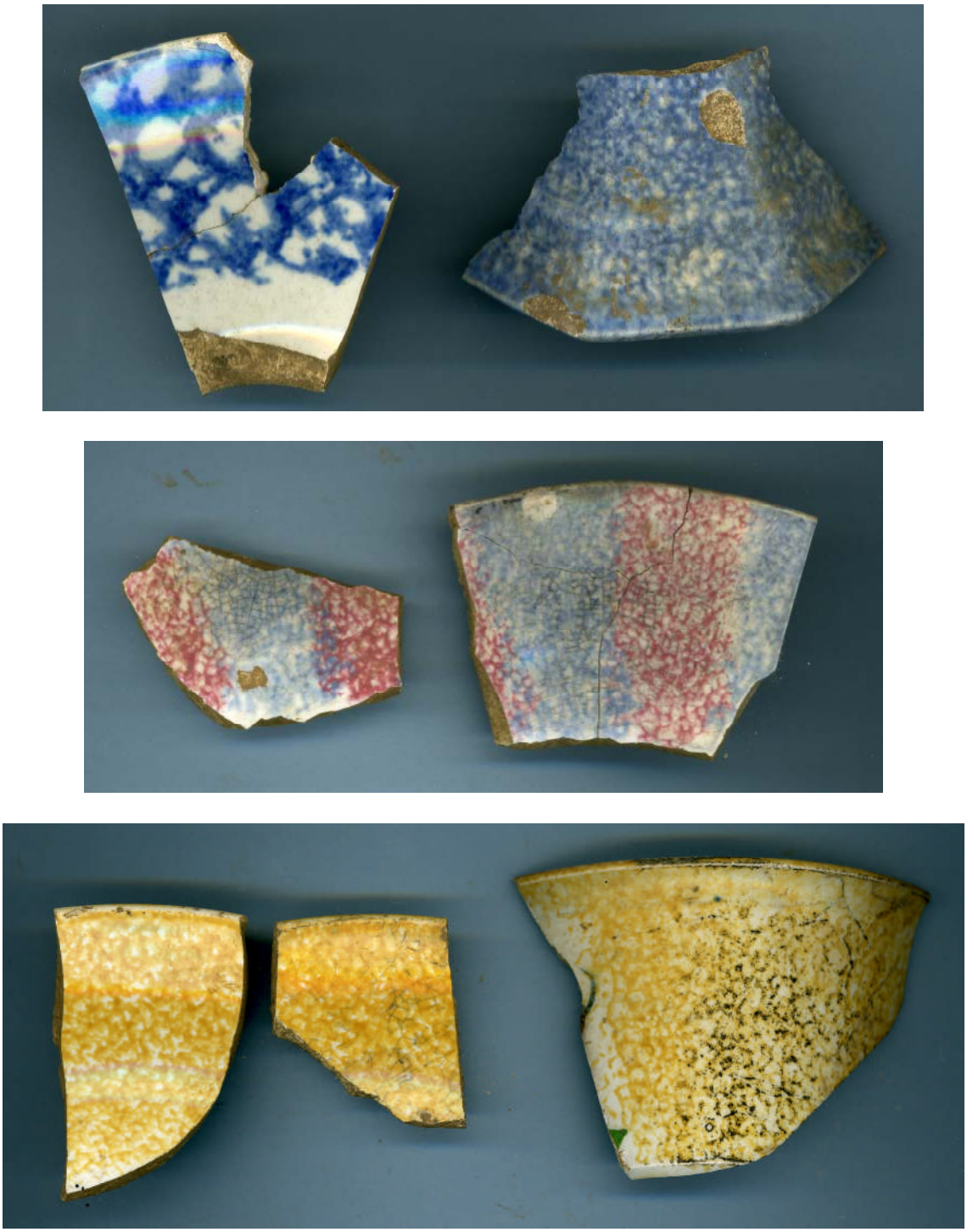


Figure 50. Sponge decorated wares were also well represented in the assemblage and included monochrome blue wares (top), polychrome (red and blue) wares (middle). And monochrome yellow wares (bottom). The yellow sponge decorated London-urn shaped cup (bottom right) also had a painted decoration that probably represented a peafowl. The majority of these wares were represented by teawares—including a teapot or sugar bowl lid (top right). All artifacts are actual size.

Figure 51. Painted wares were also represented by monochrome blue "Flow Blue" wares illustrated with a single large floral pattern (top and middle). Flow blue wares were also represented by printed wares (bottom). Both teawares and tablewares were represented by these flow blue decorated wares. Printed flow blue wares are common during the 1840s. All artifacts are actual size.

Figure 52. This unidentified transfer print saucer recovered from Feature 2 is decorated with a grape leaf and vine with grape cluster border. Although unidentified, this pattern is illustrated in Williams (1986:466) who refers to it as the "Bird at Fountain" pattern. The saucer is reproduced at its actual size.

Figure 53. Transfer printed wares were also present in this assemblage. Identified patterns included the red colored SOWER pattern (top) and the two-tone red/green BELZONI pattern (middle and bottom). Printed wares appear to have been represented predominately by teawares. All artifacts are actual size.

Figure 54. The Belzoni pattern cup and saucer was marketed by Enoch Wood and Sons. This cup and saucer are decorated in the Belzoni pattern and with the Enoch Wood and Sons backstamp mark (Snyder 1997:171). Pottery fragments recovered from the Jones/Hillerman Site were from a similar vessel, albeit in a two-tone red and green color.

Figure 55. Enoch Wood and Sons were known to produce two-color transfer printed wares in the Belzoni pattern. This tureen is decorated with a two-color (red and green) transfer print in the BELZONI pattern (Snyder 1997:172). These wares–which are similar to those found at the Jones/Hillerman Site—were probably manufactured during the 1830s, and represent extremely high-end, fashionable table and tea wares.

Figure 56. This cup and saucer are decorated in a red transfer print SOWER pattern. This cup and saucer were manufactured by William Adams probably during the 1830s (Snyder 1997:28). Pottery fragments recovered from the Jones/Hillerman Site (top right) were from a similar vessel.

Figure 57. This painted (polychrome overglaze floral pattern) porcelain saucer (Vessel 30) from the Jones/Hllerman Site was recovered from Feature 3. A similar porcelain cup was also recovered. As with many porcelain wares from archaeological sites, the overglaze painting had eroded off the vast majority of the sherds from this nearly whole vessel. Actual Size.

Figure 58. Suite of tableware cutlery recovered from the Jones/Hillerman Site. This included bone handled table knives (bottom), large antler-handled serving forks (second from bottom), tablespoons (second from top), and teaspoons (with partial handle; top).

Figure 59. The table knives from the Jones/Hillerman Site were of two varieties. The top two examples have a rat-tail tang that probably fit into an antler handle similar to the large serving fork noted in the previous figure. The bottom knife has a plain two-piece bone handle riveted to a flat tang.

Figure 60. An unthreaded shaker top (top right; actual size) was recovered from the Jones/Hillerman Site. This shaker top was decorated with an embossed dot and heart motif around the outer edge of the top (middle). This shaker top may have been associated with an individual shaker or potentially even with a castor set, which generally included three or more specialized containers for various condiments. The mold-blown ribbed castor bottles (upper left) were manufactured by the Sandwich Glass Company and has a shaker with a very similar non-threaded top (Barlow and Kaiser 1993: Plate 1281). Such shakers—which are often referred to as "peppers", may have been used for a variety of spices, including such things as pepper, nutmeg, or even powdered mustard. These castor bottles were often purchased in sets (with mustard and cruet bottles) that included a metal serving stand such as those illustrated in the 1865 *Illustrated Catalogue of American Hardware of the Russell and Erwin Manufacturing Company* (bottom, APT 1980:338).

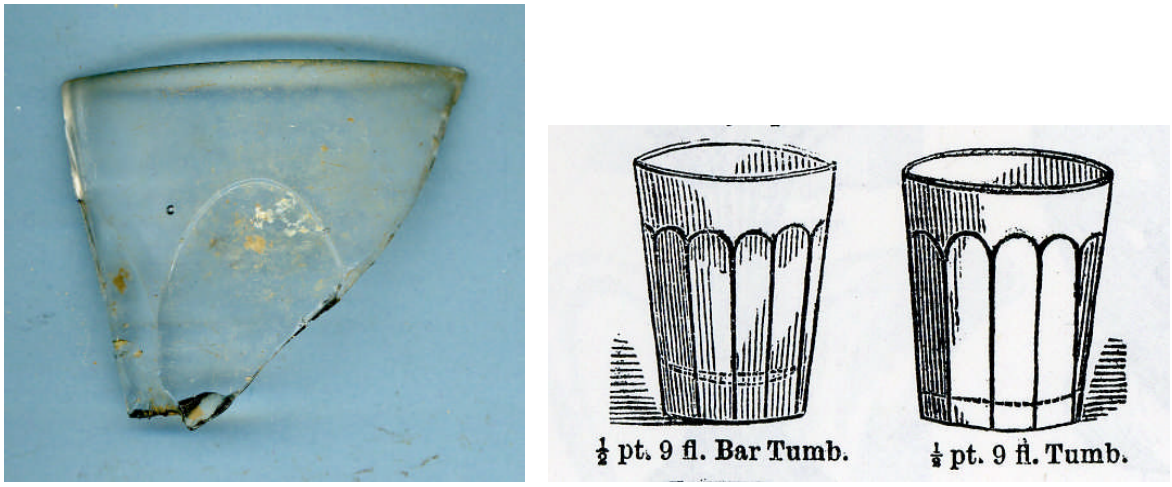


Figure 61. Glass artifacts from the Foodways Service functional category were extremely rare, but did include the remains of a single press molded tumbler, similar to the mid-century tumblers illustrated in the M'Kee Brothers glass catalogs (right; Innes and Spillman 1981). Actual size.

Figure 62. Non-ceramic tableware from the Jones/Hillerman Site included a forged iron artifact believed to be the hilt to a rat-tail tanged tableware knife (top), and an unidentified striped glass item, potentially representing some form of tableware, or whimsical item. Both items are represented at Actual Size.

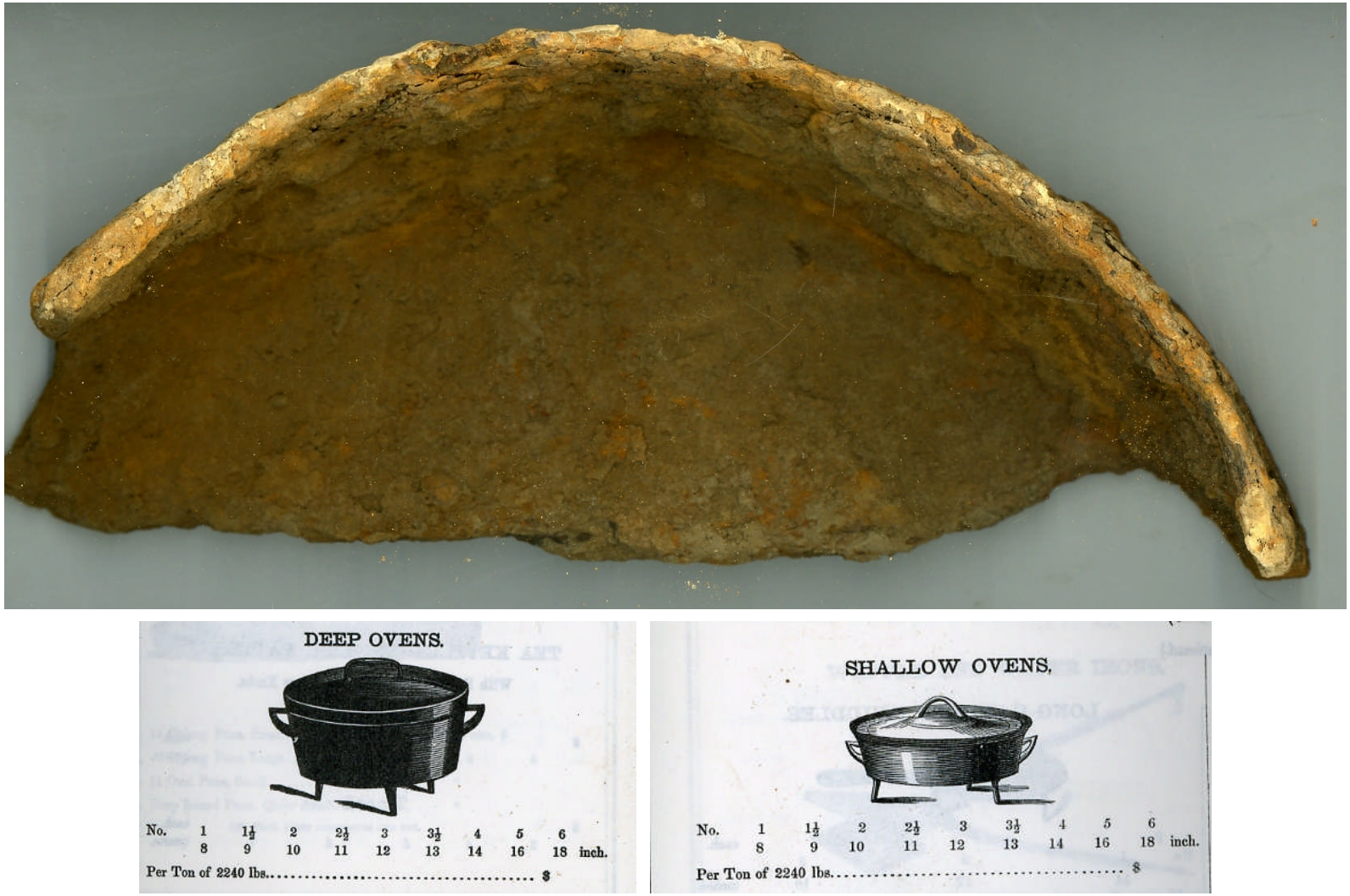


Figure 63. Several fragments of a cast iron Dutch oven lid were recovered from the Jones/Hillerman Site (75% actual size). These heavy lidded cooking vessels are associated with baking on an open-hearth or cooking fireplace. The 1865 *Illustrated Catalogue of American Hardware of the Russell and Erwin Manufacturing Company* (APT 1980: 393-93) illustrated both a shallow and deep variety available for purchase at that late date.

Figure 64. Fragments of a small lead glass container with a folded lip and applied string decorative ring(s) was recovered from the Jones/Hillerman Site (right; actual size). This probably represents the remains of a small glass bottle or decanter similar to those illustrated at left. This decanter may not have been as ornate as these two small, blown-in-mold decanters with applied decorative rings and pattern molded bodies which were manufactured by the Sandwich Glass Company (left; Barlow and Kaiser 1993: Plate 1306).

Figure 65. One of the more interesting glass artifacts recovered from the Jones/Hillerman Site was this wine bottle shoulder seal. This applied seal was once part of a wine bottle that originated in Bordeaux, France. The seal reads "DE LUZE & DUMAS / BORDEAUX." The firm of De Luze and Dumas was in business from circa 1820 until 1822. It is reproduced at 200% its actual size.

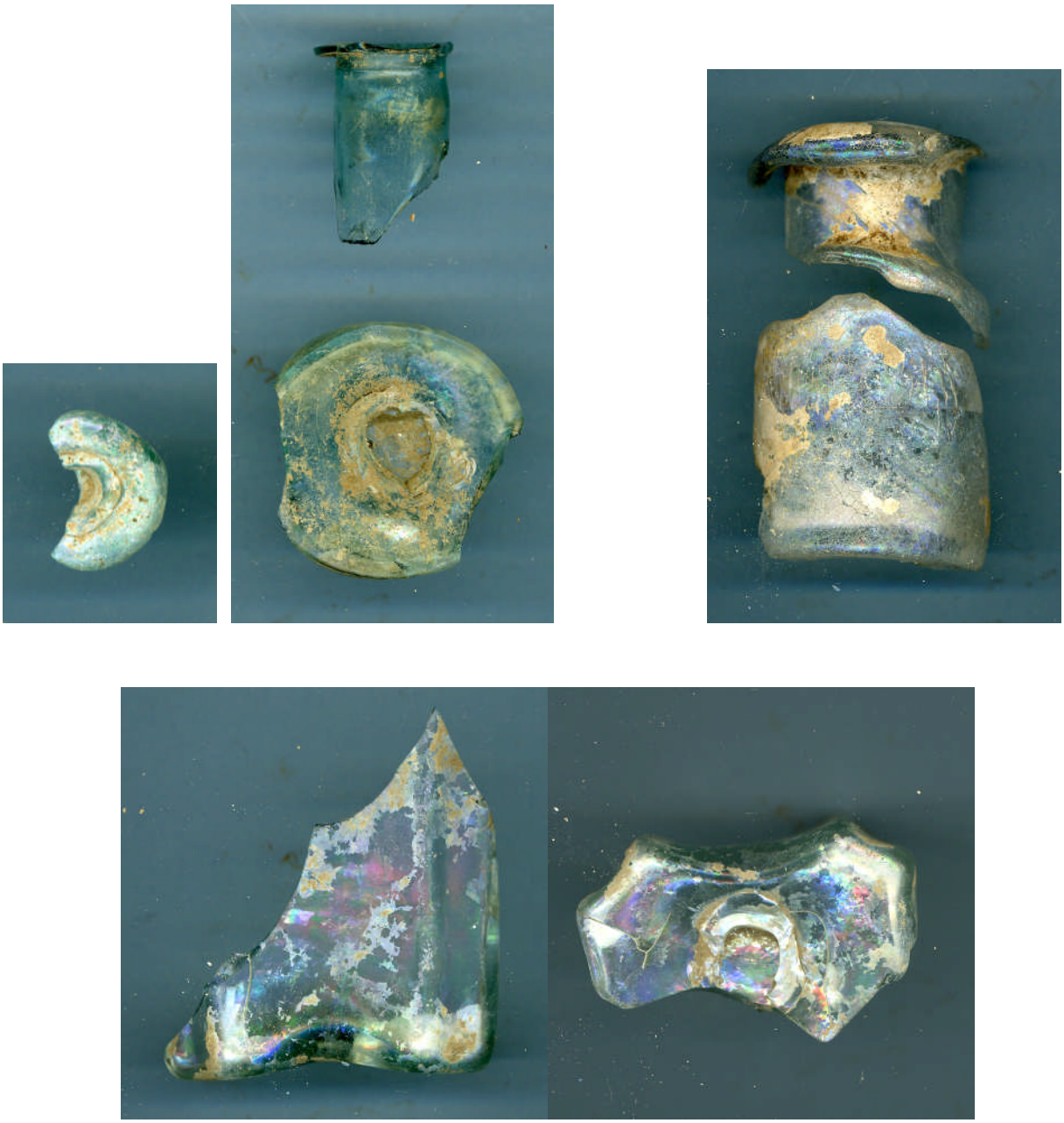


Figure 66. Glass bottles and/or containers were poorly represented at the Jones/Hillerman Site, but did include a couple of small round vials (top left), a small lead glass jar/bottle (top right), and this fluted bottle (bottom)—all of which were pontiled.

Figure 67. Remnants of folding eyeglasses or spectacles from the Jones/Hillerman Site included the metal frame sidebars and glass lens fragment (top left; Actual Size). The "turn-pin temple spectacles" (top right) are an example of a similar pair from the early nineteenth century. The bottom illustration is a detail from a small watercolor portrait painted by John Wesley Jarvis on ivory in 1807 and entitled *Portrait of a Gentleman* (*The Magazine Antiques* April 2009). This portrait illustrates similar "turn-pin temple spectacles" in use by a young "gentleman."

Figure 68. Artifacts associated with jewelry and/or personal adornment were uncommon, but included this clasp swivel (potentially from a necklace or watch fob), and two faceted beads. Actual Size.

Figure 69. The artifact assemblage from this site suggests that the occupants, or at least some of them were literate. The presence of multiple writing styluses suggests potential ability of site occupants to write and/or do math computations, or the education of young children. Actual size.

Figure 70. Detail of small non-ferrous metal artifact believed to represent the remains of a harmonica reed plate (or soundboard) (Actual Size). Someone living or visiting this site may have been learning (or potentially proficient at) the playing of the harmonica. Actual size.

Figure 71. Personal hygiene items were few in number from the Jones/Hillerman Site, but did include this fragment of a bone lice comb. Actual size.

Figure 72. Smoking pipes were represented by both pipe bowl (top) and stem (bottom) fragments. The pipe bowls were simple fluted and cross-hatched varieties. The pipe bowls probably represent both long stemmed and short-stemmed (or elbow) pipes. Actual Size.

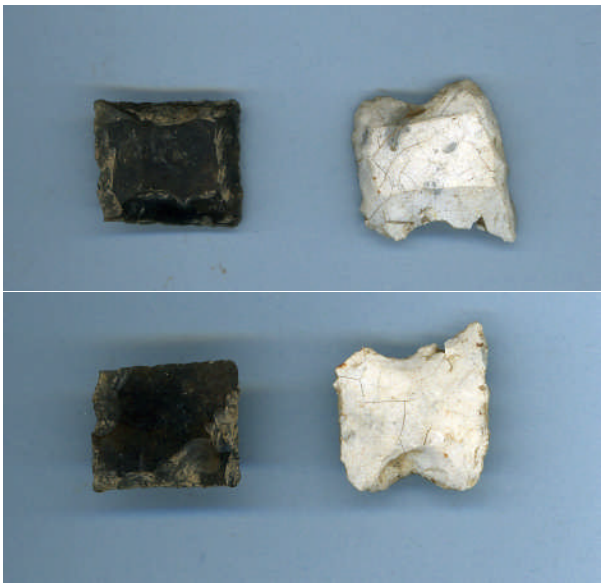
Figure 73. Toys were present at the Jones/Hillerman Site in fairly small numbers, but did include a porcelain doll leg (left) and a stoneware marble (right). Actual Size.

Figure 74. Clothing related artifacts included a variety of buttons (bottom). The buttons, from left to right, included a single press molded milk glass (or Prosser) button, shell buttons, a stamped metal button and multiple bone, and brass loop shank buttons. The bone buttons were represented by one-hole, four-hole, and five-hole varieties.

Figure 75. Several iron buckles were recovered from the Jones/Hillerman Site. Although the smaller ones (left) may represent clothing related fasteners, the larger examples probably represent harness buckles (and not waist belts).

Figure 76. Architectural hardware was poorly represented at the Jones/Hillerman Site. An unusual gray metal capped machine cut nail was present in the assemblage (top). A couple of potential furniture pulls (middle), as well as a potential door latch (bottom) were also present. Actual size.

Figure 77. Artifacts associated with buildings and/or structures were recovered from this site and included soft-mud brick and/or daub fragments (top), and machine cut nails (bottom). Actual size.



(enlarged 200%)

Figure 78. Artifacts associated with firearms were relatively uncommon, but did include two gun flints (top), as well as a single percussion cap (middle), and a couple of cast lead balls and melted lead (bottom). Both gunflints were of the blade variety, with one (upper left) being relatively unused and the other (upper right) exhibiting extensive evidence of use, re-working, and burning. The gunflints, musket balls, and melted lead are reproduced at actual size, whereas the percussion cap has been enlarged 200%.

Figure 79. Sewing activities were represented by fragments of small sewing scissors, thimbles, straight pins, and potential needles (from left to right). The thimbles were of the closed and open end varieties. Actual Size.

Figure 80. This large sheet metal cowbell was recovered from Feature 2. Reproduced at 75% original size.

Figure 81. Horse related artifacts included a single horseshoe (left), and a cast iron stirrup (right). Artifacts represented at 75% original size. The small size of the horseshoe, as well as the stirrup, suggests the presence of riding horses and not draft horses.

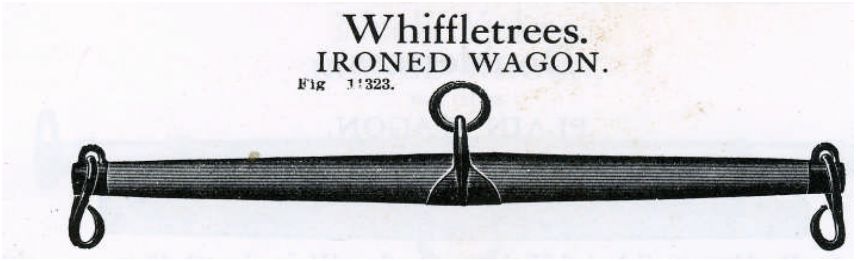


Figure 82. Two views of a whiffletree center hook from the Jones/Hillerman Site (Actual size; right), and illustrations from Spivey (1979:23, 109).

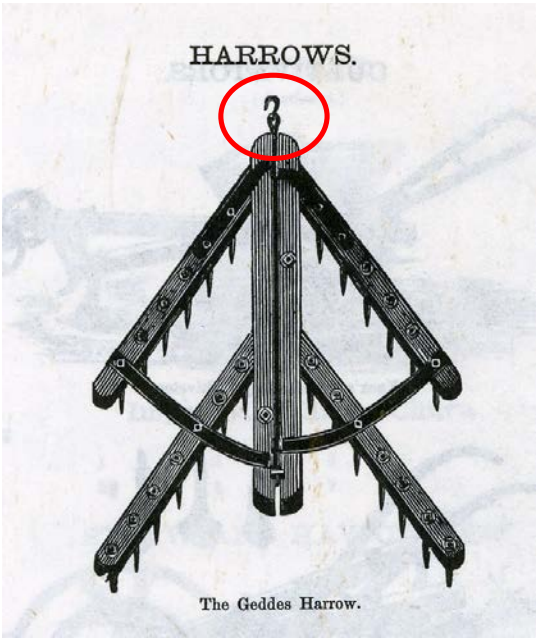


Figure 83. This large forged iron hook has a large staple passing through an eye formed in its upper end (and barely visible in this picture due to the rust build-up). Although its function is unknown, it is similar to hooks attached to the front end of agricultural equipment, such as the harrow illustrated in the 1865 *Illustrated Catalogue of American Hardware of the Russell and Erwin Manufacturing Company* (APT 1980:303). It also could have functioned as a simple whiffletree end hook with a staple connector (see previous figure).

Figure 84. Midwestern farm life would be impossible without a utility axe for cutting wood. This ax was recovered from Feature 2 with several other primary artifacts. Actual Size.

Figure 85. Two views of a twisted and broken chain link from the Jones/Hillerman Site. This chain link was probably associated with agricultural activities.

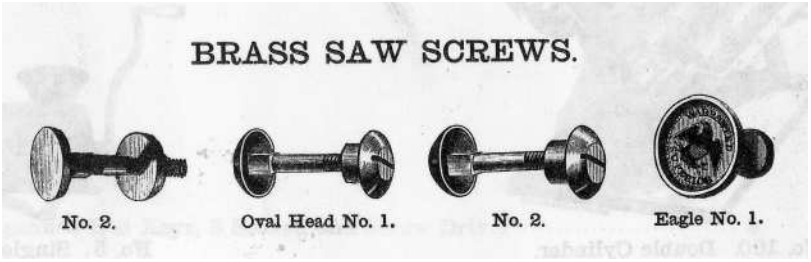


Figure 86. This antler (top) was cut to a length reminiscent of an antler handle, and may suggest that limited bone/antler working activities (antler handle manufacture) was being conducted at the Jones/Hillerman Site. The presence of a brass saw screw (middle) suggests the presence of a small hand saw, potentially for woodworking or other crafts (such as even antler handle manufacture). The illustration of brass saw screws (bottom) is from the Russell and Erwin Manufacturing Company's 1865 catalog (APT 1980:103). Actual size.

Summary and Conclusions

The Jones/Hillerman Site (11Mx306) represents the physical remains of a relatively undisturbed and/or well preserved, short-term (circa 1835-45), rural, upland occupation in southern Illinois' Massac County. Based on its ability to yield significant information relating to the early lifeways of the pioneer settlers at this locale (and the state as a whole), this site was determined eligible to the National Register of Historic Places under both Criteria A (social history) and D (archaeology). The subsequent archaeological mitigation of this site has provided an invaluable glimpse into the material culture and lifeways of an initial settlement-period farmstead or rural homestead in upland Massac County. Complimenting the material culture is the archival record, which although not particularly rich and detailed, does give us some insights into the business dealings of the landowner and potential site occupant, Mr. Hillerman.

Although much has been written over the years about the early history and architecture of Illinois, much of this body of literature does not take into consideration the relatively recent archaeological research that has been conducted within the state over the past few decades. Collectively, this research has produced a wide range of new data that has contributed to our understanding of the early pioneer lifeways in the state during the initial years of settlement by European Americans. The material culture remains from the Jones/Hillerman Site have the potential to contribute dramatically to our understanding of early lifeways during the formative years of the rural Massac County community.

Our research on early to middle nineteenth century archaeological sites in Illinois (whether urban or rural) within the past few years has focused predominately on defining the structure of the site and its evolution through time. How has the site evolved through the years and what does that change suggest about the evolving adaptive strategies employed by the site occupants? This research strategy has attempted to document the changing structure of the site through the mapping of structural features, subsurface pits, and activity areas within the greater yard (and surrounding landscape). At the Jones/Hillerman Site, our primary goal has been to completely expose and map the subsurface features at the site (which compliments the controlled surface date) to better understand the structure of the site. Additionally, the excavation of the features has allowed us to collect artifactual data (particularly glass, ceramic, floral and faunal remains) that lends themselves to addressing several research questions. The research questions that have driven the existing project are outlined below.

1) Date and Function of Site: On a very basic level, we are not clear as to the date of the initial occupation of the Jones/Hillerman Site, and to a lesser extent to the type of occupation initially present (farmstead, rural home site, or other specialized activity). Are the features discovered at this site associated with an earlier component (potentially dating from the later 1820s and earlier 1830s)?

2) Changing Structure of the Rural Landscape. Little is known about the structure of the rural farmstead or rural house lot during the initial years of settlement in this or the surrounding rural community. Such basic questions as "What types of outbuildings (barns, privies, wood sheds, exterior cellars) and/or activity areas (barnyard,

domestic/inner yard, and public/front yard) were present?," and "How did they change through the years?" needs to be addressed. Does the structure of early farmsteads differ between ethnic and/or regional groups (German versus Southern versus Northern families), between socio-economic strata (the working class versus merchant class), and between environmental regions (northern Illinois versus southern Illinois)?

The value of archaeological sites such as the Jones/Hillerman Site lies in its contribution to a larger comparative database. Individually, investigations at sites such as the Jones/Hillerman Site often raise more questions than they answer. Similarly, the excavation of a single site such as the Jones/Hillerman Site will not allow us to answer these complex questions by itself. Although archaeologists in Illinois have been actively pursuing research on sites of this type for nearly 30 years now, the reality is that there still is not a large comparative database of sites to draw upon for comparison. Sites like the Jones/Hillerman Site are part of a growing comparative database of professionally investigated sites from across Illinois that give us insights necessary to begin to formulate answers to such complex questions, and the utility of the archaeological data from the Jones/Hillerman Site is its contribution to this comparative data base.

Inherent problems with existing historic site databases in Illinois. Our research interests at Fever River Research have focused on the *explicit, systematic, thorough, detailed, and factual description* of site structure, feature morphology, and artifact diversity at these sites, and our major research interests within the past few years has been to look at the variation in these early sites—whether it be in feature morphology or the quantity and quality of various artifact types present. It is our hope to be able to discern differences in the structure of these sites and their artifact assemblages in order to speak intelligently about the quality of life of these early settlers—and how it varied among the various families who were moving into the unsettled regions of the state.[24] Too much of the historical archaeological writings being produced in Illinois are being generated from either limited excavations, or poorly excavated and understood sites. Good archaeological research and synthesis starts with quality excavations and data.

Unfortunately, the archaeological sites within this comparative database are of extremely variable utility for comparative use. Although several factors contribute to the poor comparative value of many of these sites, one of the major concerns of this author regarding the utility of these sites for comparative use is the inability of the authors to distinguish between basic description and interpretation in their research. One of the major problems that we see confronting historical archaeologists in Illinois is their ability to confuse the process of *description* from the process of *interpretation*. Although this should be self-evident and not necessary to state here, too many of our colleagues in Illinois confuse the two. We cannot stress enough the need to distinguish between the two, whether at the artifact, feature, or site level.

[24] Mansberger has often used the term "thick" description to describe the *explicit, systematic, thorough, detailed, and factual* description of site structure, features, and artifacts at a site. "Thick description" as introduced into anthropology by Clifford Geertz, who borrowed it from Philosophy, refers to layered, rich, and contextual description of an event or social scene. Schlereth (1985:165) defines it as "the technique of subjecting to intense scrutiny *a mass of facts of every kind* so as to elicit every possible cultural meaning from them" (italics mine).

Stating that a particular feature is the physical remains of a privy or cistern is not a description, but an interpretation—and such interpretations are often incorrect and can lead to misinterpretation of such basic concepts as site function. Feature descriptions should focus on the basic facts of pit size, shape, fill contents, and associations with other feature types—which is in turn followed by an interpretation. For example, a particular feature should not be described as a privy (which is an interpretation), but as a pit of certain dimensions with a distinctive fill sequence—which in turn leads us to interpret this feature as a privy. Often feature "descriptions" presented in archaeological reports are, in essence, interpretations and fail to give sufficient descriptive information (such as character of fills and/or presence of fecal material in a pit) for the reader to make his or her own interpretation as to the function of a particular feature. Similarly, features with identical morphological characteristics are often assigned different functional interpretations (in the form of "descriptions) by the same authors without explanation. Other researchers, using these "erroneous" feature types in subsequent reports, only perpetuate this problem of misidentification.

Another inherent problem with the current database is that a number of historical archaeologists in Illinois have expressed the view that the archaeological record relating to "frontier" sites is relatively homogeneous—in both feature types (and/or site structure) and material culture (artifact variety as well as density).[25] The belief and misperception that these early assemblages all look alike is an overly simplistic viewpoint that has contributed to a poor understanding of the dynamic character of the early settlement landscape and the settlers who created it. Simply put, variation does exist (in both site structure, and in the material culture used and/or discarded by the site occupants). Identifying and explaining that diversity and/or variation is what we, as archeologists are trying to do.

Presently, Mazrim (2002:9, 248), in his oft-cited "*Now Quite Out of Society": Archaeology and Frontier Illinois* notes that "the cultural landscape of the new American frontier in Illinois was reasonably homogeneous…" and that the archaeological sites studied by him "reflect homogeneous and pervasive patterns of consumption of ceramic and glass products." In yet another location, Mazrim (2004:**6**) has noted "most case studies in Illinois reveal homogeneous, 'middle class' values… offering few insights into economy or status not readily available in the archival record."[26] Mazrim (2002:282) suggests that "the apparently homogenized nature of artifact assemblages from rural frontier sites in Illinois can be in part assigned to the mass production of many forms of durable goods, as well as certain limitations inherent in the archaeological record." We contend that such statements are not backed by the great variability present in the archaeological record, and that the suspected "homogeneity" of the archaeological record noted by Mazrim is an artificial construct of the historical

[25] The term "frontier" is an oft-misused term used by many historical archaeologists to describe a variety of early living conditions (cf. Mazrim 2002). This term has a variety of functional, spatial and temporal parameters that are often poorly defined by the archaeologist.

[26] Mazrim (2006:135) further explains naively that "the reason for this turns out to be a surprisingly simple one: while certain Queenswares were indeed more expensive than others, all were reasonably inexpensive when compared to other forms of dry goods commonly exchanged in country stores and estate sales — within an often cashless economy. Put more simply, we have been looking for expressions of wealth and status in goods purchased at the same Wal-Mart."

archaeologist. Sites from this period in Illinois *do* exhibit variability in both site structure and material culture assemblages. Understanding this variability in both site structure and artifact variability is difficult with our present state of knowledge, but it is our goal as historical archaeologists to sort out these differences. Part of the problem is the way our fellow archaeologists have excavated sites and their inability to understand the material culture assemblages—often resulting in the "homogenization" of the artifacts recovered.[27] Archaeological assemblages are *not* homogeneous in their character. Differences and/or variability in assemblages are subtle, *but none-the-less very real and significant* (see also Branster 2009).

The Jones/Hillerman Site and the comparative database. The Jones/Hillerman Site is located at the far southern tip of Illinois, within a region that has—in many ways—closer ties to the deep South than with other more northern regions of the state. As noted above, although the archaeology of historic era sites has been on-going for many years now in Illinois, the number of comparative sites that have been subjected to Phase III archaeological mitigations within any one region of the state (such as southern Illinois) is still fairly limited.

One of the earlier seminal works for southern Illinois is Mary McCorvie's 1987 *The Davis, Baldridge, and Huggins Sites: Three Nineteenth Century Upland South Farmsteads in Perry County, Illinois.* McCorvie (1987:i) interpreted these three sites in a context of the Upland South cultural tradition and noted that the early occupants of these sites brought "with them many of the cultural traits of that region, including a dietary reliance on corn and pork, a wood-oriented technology, and a family oriented settlement system." Similarly, the Fair View Farm Site in Saline County was interpreted as an "Upland South cultural tradition farmstead" in 1989, further establishing the use of the Upland South model for interpreting sites within this region (McCorvie, et al. 1989). Both of these projects were undertaken by American Resources Group, Ltd. (Carbondale, Illinois). More recently, American Resources Group has conducted several Phase III mitigation projects on rural sites in southeastern Illinois in the vicinity of Equality and the salt springs in Gallatin and Saline Counties (M. Shah, personal communication 2009). These more recent investigations also have taken a very similar approach, interpreting the sites using the basic model of an Upland South farmstead as postulated by McCorvie (1987).[28]

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[27] The often-confusing artifact tables used to summarize the material culture remains recovered from many of these sites emphasize this problem. These problems are exasperated by the fact that many of the archaeologists studying these sites do not have a good understanding of the material culture of the period under study. Similarly, it is doubly frustrating when an archaeologist fails to include basic artifact tables and/or inventories within their reports (cf. Mazrim 2008 with its emphasis on artifact photographs at the expense of basic artifact tables).

[28]The George B. Hargrave Farmstead (11G186) in Gallatin County was a short-term site occupied by a single family from circa 1830 to 1859 (Shah, Lence, Titus, Parker and Scott 2002). Archaeological site 11J1115 was a tenant occupied farmstead located in rural Jackson County (11J1115) (Shah, Lence, Parker, Titus, and Williams 2003). The Porter-Keasler Farmstead (11G361) was first occupied by a free black family (formerly worked at the salt springs) during the 1830s-1850s, and subsequently was occupied into the 1880s by a white family. Discrete activity areas associated with each component were identified by the authors (Shah, Lence, and Aberle 2004). Another unnamed tenant-occupied farmstead from Saline County mitigated by ARG was identified as 11SA539. This site was occupied from the 1840s to 1860s (Shah and Lence 2005). The McCluskey Farmstead (11SA526) was another short-term site occupied by a blacksmith/miller from the middle 1830s to the middle 1840s. It was mitigated in conjunction with another nearby unnamed site (11SA510) that apparently consisted of three discreet areas. Area C was the oldest area of the site, dating to the 1830s and 1840s and presumably occupied by tenants. Area A was

The Jones/Hillerman Site in a Regional Context. The Jones/Hillerman Site appears to represent the remains of a small farmstead or rural homestead occupied during the later 1830s through circa middle 1840s. Unfortunately, the site-specific documentary research has given us few insights into who exactly occupied this site. The most logical interpretation is that this site represents the remains of a small short-term Upland South farmstead. The following discussion attempts to interpret the site in terms of a regional agricultural context, and raises questions as to the inability of the Upland South Model to interpret these short-term pre-Civil War sites of southern Illinois. Initial observations suggest that the "minimal" or "basic" rural site identified within this region of Southern Illinois is structurally different from similar, contemporary sites within more northern regions of the state. The following discussion attempts to identify, and potentially explain, some of these differences. Unfortunately, this author is aware that many of the following statements are intuitive observations and not presently backed up by quantitative data.

The Jones/Hillerman Site was relatively small, and consistent in size with other short-term rural occupations from this time period. The small feature cluster and associated artifacts appears to represent a relatively short-term rural occupation. The artifacts recovered from the site appear to indicate the presence of a family, as the presence of children (as indicated by the presence of a doll) and presumably women (as indicated by the presence of sewing items, particularly straight pins) are both documented at the site. Although rural activities such as wood chopping (indicated by an ax), cow and/or cattle grazing (indicated by a large cow bell), and the presence of wagons or buggies (indicated by the singletree hook) are documented by the artifacts, such activities do not necessarily indicate farming activities—and can just as easily be associated with a rural home site (and not a farm). Additionally, hunting and/or protection by way of firearms (indicated by the presence of a gunflint and percussion caps) were also documented at this site.

Short-term sites from this period—whether from more northern Illinois or southern Illinois—are generally represented by low feature and artifact density. Unfortunately the majority of the structures from this period—whether associated with a yeoman or more successful farmer of either Northern or Southern heritage—were relatively impermanent structures that have left behind limited subsurface archaeological signatures, especially after being exposed to post abandonment agricultural activities (such as plowing). Interpreting the layout of site, based on archaeology, is difficult at best. The simple matter of determining the location of the primary domestic structure (or dwelling) is often next to impossible unless the presence of a fireplace foundation is present (such as at the 11Sa539; Shah and Lance 2005). With probable cellars being called privies, storage pits being called hog scalding pits, deep shaft

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occupied by William A. Swinney from the 1850s to circa 1880s. Area B was occupied by the Cook family—who were rural blacksmiths—from the 1870s through the 1940s (Aberle, Lomas, and Lence 2006). Most recently, ARG mitigated two rural sites in White County near Carmi. This work included the documentation of two early farmsteads—one of which was a rather unique fortified farmstead from the War of 1812 era. The Williams Fort (11WH264) was occupied from ca. 1810 to sometime in the 1830s, whereas the Williams Farmstead (11WH262) was occupied from ca. 1810 to sometime in the 1840s (Aberle, Lence, McNerney, and Fink 2008). Although the site does not represent a farmstead, ARG's work at the abandoned townsite of Brownsville (located in Jackson County and occupied during the 1820s-40s) is also of great interest with regard to the archaeology of the region (Shah 2005).

pits being called "unlined cisterns", and small indeterminate pits without any evidence of in situ burning being called smoke houses, the potential misinterpretation of features makes this even more difficult.

A comparison of the Jones/Hillerman Site to the Gaston/Dorsey (11Sa539) (Shah and Lence 2005)[29] and the Davis (McCorvie 1987) sites sheds a considerable amount of information on the structure of these "minimal" and/or "basic" farmsteads or rural homesteads in Southern Illinois during this initial settlement period. One of the more interesting aspects of both the Davis Site and Gaston/Dorsey Site is that the archaeological site plans hint very strongly as to the location of the domestic structure (i.e. the house), and allows for a more holistic interpretation of the features at these two sites. One of the more obvious archaeological signatures of a structure is the presence of a foundation system—whether representing a perimeter foundation or less substantial pier supports. Unfortunately, due to the relative low incidence of their use, their shallow depth if constructed (many of these foundation systems were constructed on, or very near, the historic grade), and the relatively aggressive post-abandonment plowing activities sites of this era have generally been subjected to, such structural features are seldom present at such short-term sites occupied during this era in Illinois —whether in more northern Illinois or southern Illinois. No structural foundations were uncovered at either the Jones/Hillerman Site or at the Davis Site. As noted above, the lack of such features at both of these sites is probably due to the shallow nature of the original features, as well as to the aggressive post-abandonment plowing that occurred at these sites. Although perimeter foundations and/or piers are often not documented at a site of this era, the U-shaped foundations of a fireplace and/or chimney stack once associated with a log structure is often found at these early settlement sites (cf. Crazy Dog and Hartford sites, in Mansberger 1982, 1998)—particularly in locations that have not been deeply plowed, a condition that is becoming more and more infrequent with time. The physical remains of a U-shaped fireplace foundation documented at this site suggested the location of the primary dwelling at the Gaston/Dorsey Site. This fireplace hearth was centrally located within a cluster of features located towards one end of the site, as defined by the surface scatter of debris representing this site.

As noted above, structural features (such as perimeter foundations and/or fireplace foundations) were not documented at the Jones/Hillerman Site. Nonetheless, nails (machine cut and forged), aqua window glass, and an occasional fragment of what appears to be architectural iron hardware were present at the site in limited numbers. Building stone and soft mud brick or daub were also present in even smaller numbers. No mortar or plaster was noted at the site. The extensive amount of softmud brick and/or burned daub (present in very small fragments) in association with ash and charcoal in Features 3, 4, and 5 strongly suggests the presence of a cooking fireplace at this site. These structural artifacts suggest the presence of a log structure—albeit one that may have been fairly well finished with a wood shingle roof and/or interior casework (trim and doors). As will be discussed below, this structure may have been situated over Features 2 and 8.

The presence of a sub-floor storage cellar can often indicate the presence and/or location

[29] Shah and Lence (2005) do not assign a name to this middle nineteenth century tenant farmstead in Saline County. To facilitate the above discussion, in this report we refer to site 11Sa539 as the Gaston/Dorsey Site in reference to "the most likely occupants of the site" as identified by Shah and Lence (2005:1).

of a dwelling, or other structure. Basement cellars (defined here as large, nearly full-height, often masonry-lined rectangular or square pits, often with a bulkhead entrance way to accommodate steps) are infrequent in the archaeological record of this period—particularly within southern Illinois. Their presence tends to document either 1) a functionally different site type (such as a store; cf. the abandoned townsite of Hartford in Mansberger 1998), or 2) the dwelling of an extremely affluent household. Similarly, ethnic Germans and/or northern Europeans were much more apt to build basement cellars than their American counterparts. Basement cellars were not present at the Jones/Hillerman, Davis, or Gaston/Dorsey Sites.

In contrast, less substantial pit cellars (small in size and depth and lacking bulkhead entrances) were often used for basic storage needs—whether foodstuffs or other non-food commodities (see Mansberger, Phillippe and Stratton 1998). Unfortunately, these sub-floor storage pits were often located beneath a variety of buildings—and not solely beneath the domestic structure at a site. Nearby domestic outbuildings (such as a summer kitchen, wash house, or utilitarian shed), as well as a barn or other agricultural outbuilding often incorporated a pit cellar into its construction. Similarly, the inner yard activity area associated with a dwellin often contained a pit cellar covered with mounded dirt and lacking a superstructure.[30] As such, the presence of a pit cellar does not necessarily indicate the presence of a dwelling overhead.[31] Three narrow, rectangular, shallow pits (identified as Features 2, 3, and 4) were identified at the Davis Site and, as McCorvie (1987:43) notes, "Features 2, 3, and 4 were all possible house cellars." These three pits were located adjacent, and aligned to one another within the center of the site, and appear to represent contemporary features. The morphology of these features is consistent with small sub-floor storage cellars associated with a domestic structure. Although no doubt once present at this site, no archaeological evidence of a fireplace foundation was preserved at this site.[32]

Obvious pit cellars were not located at either the Jones/Hillerman or Gaston/Dorsey Sites. Having said this, a small, irregularly shaped pit (Feature 4) located in front of the fireplace foundation (and in an area that would have been below the room associated with this fireplace) was interpreted by Shah and Lence (2005:51, 54) as a "small unlined sub-floor pit" or pit cellar. The irregular plan, V-shaped profile, and adjacent rodent disturbances raises questions as to the function of this pit.[33] Two, shallow trapezoidal and/or roughly rectangular pits (identified as

[30] Today these exterior storage facilities are often referred to as "root" or "storm" cellars.

[31] Understanding the character of the surface scatter of artifacts in relationship to the underlying subsurface features can often give insights into the function of a feature (such as a pit cellar). It's presence near other domestic features may suggest that it functioned beneath a dwelling or nearby summer kitchen or washhouse. In contrast, the isolated nature of a pit cellar near the outer edges of a site may suggest the non-domestic and/or agricultural use of such pits.

[32] Unfortunately, the base map illustrating the feature locations is not tied into a map of the surface distribution of artifacts.

[33] Shah and Lence (2005:51) themselves refer to this feature as a "quasi-cellar" and note that it may have been "initially used as a clay borrow for maintenance of the hearth" (Shah and Lence 2005:51, 56). Mansberger has speculated on the fact that some of the small pits located at these early settlement sites may have been associated with daub preparation for use in a chimney or cabin walls (see Crazy Dog Site; Mansberger 1982). Another potential interpretation is that it simply represents an animal "burrow" or "wallow" located beneath the floor of a

Features 2 and 8) were identified at the Jones/Hillerman Site. Feature 2 was initially believed to represent a small pit privy. Upon further analysis and reflection—and lacking obviously organic-rich fecal deposits in the fill—this feature and adjacent Feature 8 have since been interpreted as small sub-floor storage pits or pit cellars. The storage capacity of these two pits would have been minimal.

Privies are small, specialized structures used by the individual for the disposal of human body wastes (urine and feces). Nineteenth century privies are generally represented by small buildings that contain little more than a seat or bench with a hole in it that accesses an underlying subsurface pit which receives the human waste. By the middle nineteenth century, at least in Illinois' urban centers and at more substantial farmsteads, most privies had relatively substantial pits that were often lined with planks, brick, or stone, which facilitated the periodic cleaning out of their contents for discard at other locations. Having said this, features identified as privies have been poorly documented on early settlement sites in Illinois, and their archaeological presence at the Jones/Hillerman Site seems unlikely. Several reasons may explain this observation. First, privies were often located near the edge of the domestic component, and archaeologists simply may not be excavating the entire site, and thus be missing these features. Although, this may explain the absence of some privy pits at these early sites, this seems unlikely. Another explanation is that some families constructed privies without subsurface pits (and referred to as "surface privies"). These surface privies could either have incorporated a surface container (often a "dry-earth" style tub) beneath the seat and accessed by a rear door, or allowed the waste to drop directly to the ground and be consumed by either chickens or hogs (see Stewart-Abernathy 1986:137); McCorvie et al 1989:185). In either case, a subsurface component would not have survived. Additionally, it is possible that some families—particularly more isolated rural families, may not have used privies—with the women of the house using chamber pots in the house, and the men using other outdoor facilities (such as the barn yard or stables), and the waste being discarded on the surface in the barnyard. Another possibility is that these early privies did incorporate a subsurface pit, but that these pits were shallow pits that have not survived the impact of modern agricultural practices (i.e. plowing). Excavations within downtown Springfield at the site of the Lincoln Presidential Library, Museum, and parking garage facilities have documented numerous early privy pits early privies that probably date from the 1830s and 1840s. These pits, aside from being shallow, were often trapezoidal in plan, basin shaped, and exhibited no evidence of a lining. These features, discovered in the unplowed context of urban Springfield, would not have survived the most minimal and/or basic of plowing activities. As such, the lacks of privy pits at sites such as the Jones/Hillerman Site is probably due to the fact that they were fairly ephemeral in character and were completely obliterated by post-abandonment agricultural activities. Archaeological evidence of these early, first generation privies in unplowed contexts is rare.

Another class of features present at these early settlement period sites in southern Illinois—is the large oval to circular shallow basin. These pits appear to be located close to, but slightly removed from, the main domestic dwelling in an area one might describe as the Outer Yard. These pits, which were prominent at the Davis Site, Gaston/Dorsey Site, as well as at the

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cabin and within close proximity to the heat of a fireplace and the sound of the house occupants overhead—a common feature associated with domestic dogs.

Jones/Hillerman Site, are relatively large (4-6' in diameter), relatively shallow (less than 1' at the Jones/Hillerman Site), and often appear in clusters arranged in an arc around the presumed location of the domestic dwelling. The pits generally have a distinctive basin shape to them and exhibit no evidence of in situ burning. The fill in these features generally represent secondary deposits discarded with the abandonment of the pit. At the Jones/Hillerman Site, these pits were filled with distinctive deposits rich in wood charcoal, wood ash, burned clay and/or daub fragments, food remains (such as egg shell and both burned and unburned bone), and domestic artifacts typical of kitchen and/or hearth cleaning activities. These distinctive dark-colored fills suggest the relatively short-term discard of hearth cleanings and kitchen slop buckets. It is interesting to note—and difficult to explain—that the ceramic and glass artifacts do not appear to represent whole or restorable items, but rather small fragmented pieces of domestic artifacts.[34]

Although the function of the basin-shaped pits is unknown, they may have functioned as less permanent and/or expedient subterranean storage pits similar to more substantial and permanent pit cellars. As McCorvie (1987:55) discussed earlier, a variety of garden vegetables and fruits (such as potatoes, carrots, cabbage, turnips, apples, pears, celery, pumpkins, and squash) "were stored for winter use in a hole dug into the ground in lieu of a cellar. The food items were placed between layers of straw, leaves, or grass overlain by a layer of dirt eight or more inches thick. The purpose of this method of storage was to keep the stored product dry and cold but avoid freezing." Allen (1963:164-165), in his *Legends and Lore of Southern Illinois* discusses this process of "holing up" food. It is very interesting to note that estate probate sale records associated with the Davis site list "several lots of 'holed up' cabbage" having been sold after the death of the land owner (McCorvie 1987:55). Discussions with early twentieth century occupants of the Fair View Farm Site (located in rural Saline County) indicate that apples, turnips and potatoes were stored in similar surface facilities called "banks" (McCorvie et al. 1989:185). According to this informant, this consisted of "clearing and raking smooth a circular area of ground about 10 ft in diameter. A bedding of straw was placed over the area, onto which was placed a layer of turnips, potatoes, or apples followed by another layer of straw, more fruit or vegetables, and yet more straw. A ditch then was dug around the mound of produce and straw with the dirt placed on top of the mounded food. In addition to providing soil for insulation, the trench around the mound helped to drain the hill and protected the food from the freezing weather and kept the produce very fresh throughout the winter. These fruit and vegetable storage facilities, otherwise known as 'apple or potato banks,' were placed in and around the garden area." McCorvie further notes that at "at least two and perhaps three banks were dug every year."[35]

[34] This may suggest the temporary stockpiling of the trash at some other location prior to the final deposition of the material in these pits. If the trash was stockpiled on the surface and inadvertently mixed prior to deposition, then fragments of individual vessels could become disassociated resulting in the deposition of only part of the vessel in a feature.

[35] In a chapter entitled "Preserving Vegetables" in *The Foxfire Book* (Wigginton 1972:176) "burying" is discussed as an option for preserving both cabbage and potatoes. Wigginton (1972:176), although he does not use these terms, essentially describes both the "banking" of cabbages and the "holing up" of potatoes. In discussing the burying of potatoes, he notes that the hole must by dug "a foot or two below the frost line."

Large, shallow storage basins such as those documented at the Jones/Hillerman Site are relatively uncommon on sites located in more northern Illinois.[36] Wigginton's (1972:176) comment that the storage pit must be excavated to a depth below the frost line, no doubt hints at the reason for the lack of this feature type in more northern and colder regions of the state—which would have required the excavation of a much deeper pit. In these more northern regions of the state, more permanent facilities consisting of a pit cellar (or two)—more than likely once located beneath the floor of the cabin—are generally found.[37] These pit cellars come in a variety of sizes and depths (cf. compare the large pit cellar at the Gifford Site to the small pit cellars at the Frakes Site; cf. Mansberger, Yingst and Stratton 2006 and Mansberger and Stratton 2000). Obviously, larger floor areas (and to a lesser extent depth) are directly related to the storage capacity of the cellar, and a greater storage capacity reflects greater productivity and/or "wealth" (as measured in both agricultural produce and non-agricultural consumer goods stored in a cellar).[38]

Conversely, pit cellars seem to be relatively small and/or uncommon in southern Illinois—at least during this initial period of settlement. When present, they are usually paired with storage basins, such as at the Davis Site.[39] McCorvie (1987) and McCorvie et al (1989:33) notice a shift from expedient storage pits associated with early sites to more permanent storage cellars during the later nineteenth century. These same authors document the persistence through the early twentieth century years in southern Illinois of the practice of "banking" foodstuffs—at least with more traditional and/or working class families. No explanation is given as to why this shift took place. It seems logical that pit cellars and storage pits represent contemporary and complimentary feature types with different storage functions. Whereas some sites in southern Illinois have both feature types, others appear to have used only storage pits. The fact that pit cellars do not appear at all early sites, and the storage pit appears more frequently, suggests that

[36] This is not to say that shallow basins are not present in the more northern sites investigated, but that they clearly appear in much lower frequency, and may have had a different function than the larger basins noted in the southern part of the state. Many of the basin pits in the more northern regions appear to be more closely associated with the domestic structure, with many of the pits having been previously interpreted as daub preparation and/or mortar preparation pits (cf. Crazy Dog Site, Mansberger 1982).

[37] It is interesting to note that the earlier sites in more northern portions of Illinois often are represented by a single small pit cellar (cf. Halpin 1995), whereas by the middle nineteenth century, sites are often represented by paired cellars. These cellars are often interpreted as having slightly different functions with one being located beneath the dwelling, and the other within the Inner Yard. By the 1840s, a common concern among the early inhabitants of the state was the "miasmas" that were believed to be generated by decaying vegetable matter placed within these cellars. Such ailments as "the ague", which were believed to be caused by these "miasmic vapors" or bad air, actually was malaria caused by the mosquito. Efforts to prevent these vapors from coming into contact with the family consisted of filling the voids between the overhead floor joists with various blocking (such as at the Perry farmhouse in rural Kankakee County, see Mansberger 1991), or moving this produce out of the domestic cellar and into an exterior cellar. Phillippe and Walters (1986) contains a discussion of miasmic vapors and early cellars.

[38] Mansberger, Phillippe, and Stratton (1998), and Mansberger (1998) both contain a more detailed discussion of pit cellars in Illinois.

[39] As noted above, the presence of multiple forms of underground storage facilities (the pit cellar and storage basin) suggests the potential storage of different commodities, and may document the misguided aversion for removing vegetable goods from beneath the structure to prevent miasmic gases from entering the domicile.

the commodities associated with the storage pit (i.e. root crops and fruits) are more ubiquitous among these early settlers than those potential non-food related commodities stored in the small pit cellar.

As noted above, there appears to be a difference in food storage practices between southern and more northern (or central) Illinois during these early years of settlement. These different strategies appear to be due, in part, to environmental factors—particularly the colder and longer winters in the north. These environmental reasons may explain the disappearance of storage basins and the appearance of more substantial pit cellars in more northern reaches of the state, where the function of the pit cellar and storage pit are combined into one (the large pit cellar). With time, and potentially associated with an interest to remove the organic foodstuffs (and the "miasmic gases") from the pit cellar located beneath the house, these more northern sites are often associated with paired pit cellars (one representing a beneath the dwelling cellar, the other representing an inner yard cellar).

But other, non-environmental factors are also at play. One factor to consider is the status of the site occupants. Perchance most of the early sites investigated in southern Illinois from this period (and represented by the presence of storage basins) represent sites occupied by fairly poor families? As the occupants of the Jones/Hillerman Site appear to represent fairly well-off individuals (at least not dirt poor farmers), this does not appear to be true. Another factor to consider is the cultural heritage of the site occupants. Most of the sites investigated and discussed here have been assumed to have been occupied by families with an Upland South heritage. Families from New England and the Mid-Atlantic regions of the United States, as well as newly arrived immigrants (such as the Germans) were also well represented within the lower Ohio drainage (as well as within the greater southern Illinois region). A quick review of the period literature strongly indicates the cultural differences between these groups, and it is not unreasonable to suspect that folks from New England had a very different strategy for food storage than their southern counterparts. Perchance folks from New England preferred more substantial pit cellars over the more informal storage basins? Clearly, ethnic Germans preferred substantial basement cellars, and storage pits would not have been considered adequate for most ethnic Germans settling in Illinois (see Baldwin Site). It is probably no coincidence that a one pfenning coin dated 1867 was recovered from the pit cellar from the Baldridge Site, which was part of McCorvie's seminal 1987 work (McCorvie 1987:128-132, 139, 144).[40]

Besides the basics of shelter (i.e. housing) and food storage, the availability of water is a necessity for rural settlement—whether in southern or more northern Illinois. During this early settlement period, a *dependable* potable water supply can be acquired from a number of sources—including nearby streams, springs, and wells. No obviously identifiable well was noted at the Jones/Hillerman Site. The proximity of the Jones/Hillerman Site to the adjacent unnamed stream strongly suggests that the occupants of this site procured water from that location. This

[40] This pit cellar measured 2.96m by 1.91m in size and extended to a depth of approximately 0.43m below the scraped surface. According to McCorvie (1987:143), this site was potentially occupied during the 1840s by the Baldridge family, but more likely by the Charles Eisenfeld family who owned the property fropn 1868-1881. Although McCorvie (1987) suggests that this pit was constructed prior to circa 1870 by an individual of Upland South background, one might question the date of construction and/or the association with a non-Anglo settler potentially of German heritage.

practice is also common among early settlers in more northern regions of the state (cf. the Frakes Site; Mansberger and Stratton 2000). Frequent trips to the nearby stream to procure water, and the subsequent carrying of filled water buckets back to the house, was an arduous task, and the construction of a well was often followed as soon as possible after initial settlement. Water procurement from adjacent streams represented a more informal, less permanent solution to water procurement than the excavated well. The "acceptance" of acquiring water from a nearby stream—and/or the failure to construct a well—may have cultural implications. Were poor southern families more apt to use the nearby stream compared to their contemporary northern neighbors? As McCorvie (et al 1989:33) suggests, in these instances, the construction of wells were "an indication of permanency." The lack of a well at the Jones/Hillerman Site suggests the short-term character of this occupation.

In contrast, habitation sites not located in close proximity to a stream or spring required the excavation of a well for procuring water. Wells are one of the most commonly found features on historic archaeological sites in Illinois. During the initial years of settlement, most wells were constructed within close proximity to the house and/or the kitchen service wing. Nonetheless, as the settlement landscape matured, wells were constructed in both domestic and agricultural contexts, and depending on the length of the occupation, multiple wells may be located within close proximity of one another (as the earlier wells often failed and had to be replaced with a new one).[41]

Nineteenth century wells were hand-dug affairs that consisted of a lined shaft that connected the ground surface to the underground water table. The shaft lining, which was not water tight, allowed water to flow through the shaft lining into the open well shaft. This water could then be removed by way of a bucket lowered into the shaft from above. The construction of wells was a tricky and difficult affair that generally required the excavation of a shaft past the level of the water table and then the construction of a lining. Depending on the location and time period of their construction, these shafts were lined with a variety of materials (including wooden barrels, wooden planks, brick, and stone). During the early years of settlement, in stone poor regions, wood lined or cribbed wells often were constructed.[42] With the availability of

[41] Although often assumed to have been located within a rear yard activity area of the house, wells were often constructed in a variety of locations around the property—including within the front yard of the dwelling. Wells were often constructed adjacent to agricultural activity areas, such as near a barn or even isolated within a field for supplying water to livestock (isolated stock wells). Similarly, less affluent families might only have access to a single well, whereas more affluent families might utilize multiple wells each with a specific use (family domestic use versus livestock use).

[42] Few examples of log cribbed or plank lined wells have been noted in Illinois. Examples include wells at Fort Massac excavated by Paul Maynard in 1939-1942, within the Scott Air Force project area in rural St. Clair County near the present day Lebanon-Mascoutah region (and historically known as the Looking Glass Prairie), and at the Losch Site (Mazrim 2002:72-74). Although Mazrim (2002:72-74) interprets some of the features at the Losch Site as cisterns, it seems apparent that these features are actually wells. It appears that the archaeology at the Losch Site documents the replacement of early plank-lined wells (square in plan) by later brick-lined well shafts (round in plan) (see Feature 222). Unlined wells probably were relatively uncommon, as the presence of the water in the shaft would cause the walls to become undercut and collapse resulting in an extremely short-lived facility. Although many unlined well shafts are found archaeologically, they generally represent abandoned wells that have had their lining material salvaged for reuse, or the upper portions of the well have collapsed, depositing the wall lining within the lower reaches of the well shaft.

ready labor and capitol, brick became the preferred choice for lining wells in stone-poor regions. Stone-lined shafts have slightly greater diameters than brick-lined shafts due to the greater width of the stone lining that forms the wall of the well (in contrast to the uniform character of a brick lining). In either case, these shafts were generally just large enough for a man to work in, and depending on the type of material they were being excavated through, were often prone to collapse during construction. The book *Foxfire 4* contains an interesting set of articles relating to water systems and the construction of hand-dug wells (Wigginton 1977; see also *State of Illinois* n.d.). Upon exiting the surface, the well shaft was capped with some form of curb, as surface water, soil, and other objects were not desirable in the well. This curb may have been of stone or frame construction. With masonry (stone or brick) well shafts, the upper few feet of the well shaft might have been laid in mortar (unlike the shaft itself) and was carried above grade to form a curb to prevent surface water from entering the well.[43] Mansberger (2003) contains a detailed context for wells and cisterns in Illinois.

Well depth is solely dependent on the depth of the water table and the availability of water. As such, early wells in a region are generally shallow compared to later wells, as modern land-use activities (such as agriculture and de-forestation) have resulted in the lowering of water tables dramatically during the later nineteenth and early twentieth century years. As a result of the lowered water table, many of the earlier, shallow wells failed (either went dry and/or had their shaft lining collapse), necessitating the replacement of the earlier wells with deeper new wells. Similarly, the linings of the early wood-lined wells often decayed and failed, and it was easier—and considerably safer—to construct a new, deeper well than attempt to repair the old one by working in the older and unsafe well shaft. As a result, multiple non-contemporary wells (clustered in close proximity to one another) are often present at a site. Often, the soil excavated from the new well is deposited within the older abandoned well immediately adjacent to it—resulting in the nearly sterile fill found in many of the abandoned well shafts. If a site has been occupied for any length of time, multiple wells may be located in close proximity to one another—paired wells generally represent the original and later replacement shaft. This is a fairly common practice and has been documented at urban sites such as the Lincoln Presidential Library and Museum project in Springfield (Mansberger 2001, 2002, 2003, 2009a, 2009b, 2009c, 2009d) as well as rural sites such as at the Losch Farm Site (Mazrim 2002:53-157).

In contrast to the Jones/Hillerman Site, no stream was located within close proximity to the Davis Site, and a potential well (Feature 7) was identified in relatively close proximity (6-7m) to the suspected location of the dwelling. This round feature was identified in the field as a narrow-diameter (1.32m by 1.20m in size), straight-sided, and deep (greater than 1.69m) shaft-like pit. Unfortunately, no shaft lining was noted, and the feature was not excavated to its base.[44] Similarly, a stone-lined, shaft-like pit interpreted as a well was present at the Gaston/Dorsey Site

[43] The *St. Clair County Board Minutes* (Volume 2, page 66) recorded the specifications for a well constructed for the county in 1818. This well was "to be walled with brick, and pailed in a strong manner, and fixed with a sufficient winlass [sic] chain and iron hoped Bucket, iron bale fasoned [sic] fast to the chain with a ring, the wall of the well to be 2 ½ feet above the surface of the earth…" (IRAD, Carbondale, Illinois).

[44] This feature was excavated by hand to a depth of 0.84m below the scraped surface. At that point, soil coring indicated the base of the feature was present at an unknown depth greater than 1.69m below the scraped surface. No further excavations were conducted with this feature (McCorvie 1987:55).

(Feature 1). In both cases, these features were located in close proximity to the suspected location of the dwelling.

Additional improvements at nineteenth century sites often included the construction of an underground storage facility for water—otherwise known as a cistern.[45] Unlike wells, which were constructed *to allow water to flow through their walls into the shaft*, cisterns were constructed with an impenetrable lining *to prevent the water from flowing out of the structure.* As such, masonry wells were constructed dry (without mortar between the brick or stone lining) and contrasts with cistern construction, which generally has a mortar lining to prevent the escape of the water. Although cisterns were often constructed to store water for use during periods of drought and/or low water availability, they also supplied a product that was distinctively different from well water. Unlike well water, which contained a variety of minerals leached from the underlying substrate (and referred to as "hard" or "limestone" water), water collected in cisterns from falling rain lacked the heavy mineral content typical of Illinois well water (and is often referred to as "soft" water).[46] Soft water was much preferred over Illinois' hard water for the washing of clothes—and the appearance of such features on the Illinois landscape during the early years of settlement may indicate the influence of the woman in the household, a desire for clean clothes, and/or the transition to a modern standard of cleanliness.[47] Mansberger (2003) contains a detailed context for well and cistern construction in Illinois.

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[45] Webster (1854:207) defines a *cistern* as "an artificial reservoir or receptacle for holding water, beer, or other liquids, as in domestic uses, distilleries, and breweries." Note that this definition does not imply that a cistern has to be set into the ground—and may actually represent an aboveground feature by this early definition.

[46] As *The Union Agriculturalist and Western Prairie Farmer* noted in 1841, "every housewife in this country, especially those living off from streams knows the value of soft water; and next to a well, which generally in the west gives limestone water, is a cistern needed." The presence of early cistern use may have regional and/or ethnic significance during the initial years of settlement in Illinois. Northern settlers (Yankees) originating from the hard rock regions of New England were not accustomed to the problems associated with hard water (particularly the task of clothes washing). Many New England immigrants in Illinois quickly learned the value of cistern construction through the agricultural press or interaction with their Upland South neighbors. Several of the primary sources used within this paper were cited from Schroeder (n.d.).

[47] Miner (1843:95), in touting the beneficial qualities of his newly constructed masonry-lined cistern, noted that the water does not become hard in the least by long standing [and] we use it freely in the family for every purpose except cooking and drinking; and indeed for these purposes I would prefer it to many wells and springs which I have drank from in Illinois and Missouri; for the water is cold and pure—only it has that peculiar taste which all rain water has." Although soft water from a cistern was used for a variety of purposes, it was used extensively for washing clothes. Soap has little affect in excessively hard water, and soft water makes soap more effective at cutting dirt. As noted in the agricultural press of the middle nineteenth century, the construction of cisterns was often carried out to ease the burden of the farm wife. Lifting water out of the rain barrel was harder than removing water from an underground source by way of a pump; similarly, hard water required much more scrubbing to clean clothes—thus the construction of a cistern often removed some of the drudgery associated with laundry activities. As noted by Schroeder (n.d.:5), an individual from Naperville who identified himself simply as "A Lady's Friend" wrote in 1845 that "if [the construction of a cistern] don't sweeten your wife's temper, and whiten out your shirt, the lady is past cure, and the shirt dyed in the wool." Yet another writer from rural Scott County wrote in 1843 "my wife has frequently said, were she to be deprived of the well or cistern, she would cling to the latter and give up the former."

In its simplest form, a cistern for storage of soft water consisted of a wooden barrel positioned near the corner of the dwelling directly beneath the end of a simple wooden gutter that funneled rain water from the dwelling's roof to the barrel—supplying a limited supply of fresh water to the house occupants. Although such above-ground facilities generally left little to no below-ground archaeological signature, archaeological evidence of rain barrel use in Illinois has been documented (see discussion in Mansberger 2003). Unfortunately, in most parts of Illinois, such above-ground water storage facilities had seasonal limitations, as their contents would freeze during the winter months. For year-round use, cisterns needed to be located below-ground. As such, many of the earlier cisterns of Illinois consisted of wooden stave-constructed, water-tight containers (such as barrels) set into the ground. Brick and stone-lined pits laid-up with the use of mortar and used as an interior lining (to prevent the water from flowing out of the storage facility) were also in use at sites associated with more established and/or affluent households. By the late 1830s and 1840s, a new type of cistern construction consisting of hydraulic lime mortar plastered directly to the dirt walls of a pit were popularized by the agricultural press and were in relatively wide-spread use, especially in central and northern Illinois. These pits may have simply had a plank covering, or a more elaborate brick dome cap (see discussion in Mansberger 2003). Such expediently constructed cisterns were fairly common in central and northern Illinois by the late 1840s. During this early settlement period of southern Illinois, pits exhibiting evidence of water-tight linings (that could be interpreted as cisterns) are relatively rare in the archaeological record. McCorvie et al. (1989:33) notes that cisterns in southern Illinois were generally "earthen or stone lined."

Another class of feature present at many of these early settlement sites in southern Illinois is a large deep basin that that is oval to circular in plan with slightly concave sides. These features are often referred to as an "unlined" or "earthen" cistern. Such "unlined cisterns" have been documented at the Davis Site (Features 1 and 5; McCorvie 1987:40-41, 51-52), the Huggins Site (Features 18, 19, and 21; McCorvie 1987:173, 179-181), the Young Tavern (Feature 7; Wagner and McCorvie 1992:98), and the Fair View Farm Site (McCorvie et al. 1989). These "unlined cisterns" are generally round in plan, extend from 6-10' in depth, often have slightly inward sloping walls with flat or basin-shaped bases, and generally *lack any evidence of a wall lining*—whether wood, mortar, brick, or stone. As noted by Wagner (2002:45), "unlined earthen cisterns have been previously encountered on several early- to mid-nineteenth-century rural sites in southern Illinois."[48] As Wagner (2002:103) notes, the large amount of rock in these features suggests "that the walls of these early cisterns probably were rock-lined (McCorvie 1987:43; McCorvie et al. 1989), although later ones appear to have been rock and plaster-lined (McCorvie 1987:50-53)." Although these features often contain stone (or rock) their upper fills, these features do not exhibit any evidence of an in situ stone lining—even at the very base of the feature. Although Wagner (2002:103) notes the postulated "rock lining served to keep the clay walls from collapsing, while the nearly impermeable clay subsoil of southern Illinois retained the water," it is doubtful that the clay subsoil would have sufficiently held the water in the cistern, and the lack of a mortar lining on the inside surface of the stone lining argues against these

[48] Sites with "unlined earthen cisterns" include the Davis Site (Features 1 and 5; McCorvie 1987:40-41, 51-52), the Huggins Site (Features 18, 19, and 21; McCorvie 1987:173, 179-181) and the Young Tavern (Feature 7; Wagner and McCorvie 1992:98).

features functioning as cisterns. Such linings would not have been water tight, and would have allowed for the mixing of hard and soft waters.

The concept of these fairly deep, unlined, roughly cylindrical pits serving a water storage function seems dubious—as the unlined walls would not prevent water from flowing out of the feature. As such, cisterns at these early settlement sites are relatively uncommon—if not nonexistent. Soft water, if needed during these years, was more easily obtained by other methods.[49] For these features to have represented cisterns, then they would have needed to have some form of lining—whether masonry or staved wood—but a lining would have been absolutely necessary. With this in mind, the function of features is often difficult to ascertain. As noted above, there is a strong need to separate description from interpretation in this research. So, what do these features represent? Multiple *interpretations* of these features are possible—and likely. Morphology alone does not give us definitive clues as to the feature's function—association with nearby features and location at site should be assessed as part of their interpretation. And, these deep pit features may represent multiple activities—and not a single function such as cistern.

It is this author's contention that many of these "unlined cisterns" probably represent abandoned wells robbed of their original masonry linings. These features are often found in close proximity to more obvious—and later generation—masonry lined wells. It seems more likely that many of these features identified as "unlined cisterns" simply represent shallow wells—wells that were either poorly lined, or lined with wood or stone, and that became "high and dry" with the dropping of the water table (which occurred quickly after settlement), and with the construction of the new well, the lining was salvaged fro re-use. Similarly shaped, stone-lined features were noted at the Fair View Farm Site (McCorvie et al. 1989). These features at the Fair View Farm Site (Features 3 and 26) were constructed with dry-laid sandstone, lacked an interior parging, were relatively wide-mouthed with an interior diameter of 1.8-2.25m, and generally extended past the existing water table to bedrock. Although described by McCorvie as cisterns, the only difference between these relatively wide-mouthed features and nearby Feature 23 (which had an interior diameter of only 60-70cm and interpreted as a well) was the diameter. As such, it is difficult to understand how one feature could have functioned as a cistern (preventing water from flowing out of the shaft and thus holding water in) while the other functioned as a well (allowing water to flow into the shaft, and thus to fill up the shaft). As such, it appears that two forms of wells (one wide-mouthed, the other narrow-mouthed) may have been present at this site. Potentially a functional (domestic versus livestock water) or temporal (early versus late) explanation can be given for these differences?

Features identified as "unlined cisterns" are relatively rare in more northern parts of the state. Such features, when present in more northern portions of the state, more than likely represent abandoned wells with their linings robbed and/or decayed away (cf. Gifford Site,

[49] Soft water was also obtained by the processing of mineral-rich hard water. Southern folk often used lye to produce limited amount of soft water needed for laundry. A common method for processing hard water into soft water was described by *The American Frugal Housewife* (1841:13) which stated that "if you are troubled to get soft water for washing, fill a tub or barrel half full of ashes, and fill it up with water, so that you may have lye whenever you want it. A gallon of strong lye put into a great kettle of hard water will make it as soft as rain water. Some people use pearlash, or potash; but this costs something, and is very apt to injure the texture of the cloth."

Edgemont Site). Most pits fitting the description of an "unlined cistern" and identified in more northern Illinois have been interpreted as shallow wells, either robbed of their masonry linings, or with a wooden lining that has completely decayed. Evidence of a wood lining—such as a barrel— in these deep pits is difficult to ascertain in the field, especially considering how many of these deep features have been excavated with the assistance of a backhoe. Cisterns clearly need a water-tight lining, and without evidence for a lining, it is hard to interpret these deep pits as cisterns. The concept of an *unlined* cistern makes no sense. Such features described by Wagner and McCorvie—with their permeable stone lining—no doubt represent wells. The presence of wood linings in some of these pits cannot be overlooked, and thus, the thought that some of these pits may represent represent cisterns or other storage facilities must be entertained—but the continued discussion of *unlined* cisterns in the archaeological record of Illinois should be discontinued. More careful investigations in the future will be needed to ascertain the presence of these potential wood-lined pits. As noted earlier, it is unfortunate that many Illinois archaeologists have latched onto the concept of this feature type to describe large, cylindrical pits of indeterminate function. The presence or absence of a cistern on these early sites clearly has significance when it comes to a site's interpretation, and the misinterpretation of these features has resulted in the misinterpretation of many sites in Illinois.

One relatively northern site with an unusually large number of these features is the Whitley Site (Gums 1999). Although not located in southern Illinois, Gums (1999:35-44) documented four large pit features arranged around a well at the Whitley Site in eastern Illinois (Edgar County) that she interpreted as cisterns. These features were relatively large in diameter (approximately 2.2m by 2.5m in plan) and extended approximately 2-2.45m in depth (terminating at or near the present water table). Although much of the stone had been salvaged from these features, sufficient amounts were intact near the base to indicate that they had originally been dry-laid, stone lined shafts (only to be later robbed of their lining). No evidence of an interior mortar lining was present. In contrast, the adjacent well at the site (which also was unlined, having been robbed of its stone lining) measured approximately 1.5m by 1.68m in plan and extended to an estimated depth of 2.9 meters below the surface. Although the exceptionally wide diameter of these four shafts is larger than most wells, they extended well into the underlying ground water table at the time of excavation, and would have extended much farther into the underlying ground water when originally constructed—suggesting that they may indeed have functioned as wells. In keeping with our previous discussion, two forms of wells may be present at this site—a wide-mouthed, potentially early livestock well, and the narrow-mouthed later and/or domestic well. If these five features represent wells, the inhabitants of this site must have had difficulty in keeping their wells from collapsing and were constantly digging and re-digging new wells. Another possible explanation is that this feature cluster (consisting of four stone-lined, wide-mouthed pits arranged around a well) represents a special use function. As will be discussed below, one possible explanation is that these pits represent feed storage pits for the underground storage of livestock feed (stored grasses, corn and/or root crops). The arrangement of these pits along a fence line, in close association with a potential stock well, suggests that these features may have been related to a rural livestock tradition—and not associated with household water storage.

One feature (identified as Feature 6) at the Jones/Hillerman Site could very well have been described as an "unlined cistern." Although the lower half of this feature was excavated by

a backhoe, it was dry at the base and was carefully inspected for evidence of a wood lining. None was found. The sides of this pit were uniform, and distinctively inward sloping with a flat, small diameter base. No evidence of differential fills such as those often associated with a well with a robbed lining (outer and inner "cone-shaped" fill zones) was noted.[50] Except for a thin upper fill associated with the post abandonment settling of the fills, the fill in the feature was predominately of a single episode of deposition. Based on the feature's profile and uniform fills it is doubtful that this feature represents the remains of a well. Similarly, as no evidence of an interior lining was noted, it is doubtful that the feature functioned as a cistern. As such, the most logical assumption is that it functioned as a storage facility similar in function to the multiple shallow storage pits or basins—but with a much greater storage capacity.

We thus must ask ourselves what would have been stored in such pits, and why are they more common in southern Illinois than in northern Illinois? The archaeological evidence clearly indicates that cattle were raised (presence of the cow bell), butchered (head and foot bones present), and consumed at the Jones/Hillerman Site. The cow bell could suggest the presence of a small herd of beef cattle, or the presence of a single dairy cow.

Historically, "cattlemen operated on the fringes of the settled area where land was cheaper and animals could graze over large areas" (Whitaker 1975:18). As the eastern seaboard became more settled and/or developed, Pennsylvania and Virginia cattlemen moved farther west into southern Ohio, the blue-grass area of Kentucky, and the Ohio River valley. By the 1820s, the Ohio River Valley was quickly becoming a cattle-raising frontier (Henlein 1961a, b).

During the nineteenth century, most cattle were grazed on grass and/or pasturelands during the majority of the year, and it was during the growing season that cattle gained much of their weight. As Snapp (1939:161) states, "winter is the 'bug-a-boo' of the cow man," and winter months were generally a period of "maintenance rations." Historically, farmers were apt to grow corn, which, among other things, was fed to cattle during the winter months. Cattle require a large amount of dry roughage for feed, with water—and water consumption is higher when cattle are off grass (and on dry winter feeds). Winter feed consists of a high percentage of roughage. In Illinois, at least by the middle nineteenth century, this winter feed often consisted of corn fodder or stover shocked in the field.[51] During this early period, cattle were generally wintered over in open field settings, and not within loafing sheds or barns typical of today's practices. Stall feeding practices were uncommon, and became more practical later in the century, especially with the development of Chicago as a new market for finished cattle—a shift that took place quickly after the establishment of network of railroads that developed during the 1850s in the Midwest (Whitaker 1975:25; Stilgoe 1982:197).

Two strategies for raising beef cattle were apparent in the Midwest during the early to middle nineteenth century. One strategy required large acreage of pastureland with limited fencing, and few barns. This extensive land use system required less capital investment and

[50] Wells robbed of their masonry lining often exhibit a distinctive cone-shaped fill with the outer fills lighter in color dating from original construction, and the inner fills darker in color from the post-abandonment filling activities.

[51] Corn fodder consists of the entire plant—including the ear—often cut and shocked in the field. Corn stover consists of only the stalks and leaves after removal of the ears by hand husking (Snapp 1939:164).

specialized in cow/calf production and the marketing of feeder calves. This strategy, which was better suited for smaller farms, was often practiced by Southern farm families who often considered themselves more cattlemen and/or ranchers than dirt farmers. In 1830s and 1840s, many Ohio farmers were purchasing Indiana and Illinois calves for their feedlots—they had more available corn, and were closer to eastern urban markets. In contrast, Yankee farmers were apt to practice more intensive land use practices, raising cereal grains (particularly corn), utilizing feed pens for finishing or fattening cattle, barns for both draft animals and dairy cows, and often producing more surplus cheese and butter than their southern brethren. Unfortunately, during the early years of settlement in Illinois, this was not a very successful strategy for the region.

By the middle nineteenth century, the later practice of bringing feed to the cattle during the winter months—as opposed to the cattle to the feed—was known as "soiling cattle." Courtney and Waring (1869:401) noted that "This is a rather unmeaning expression, and its origin is no more clear than is the fitness of its application; still it has come into such general use that it is now too late to change it. It is applied to the feeding of cattle in yards or in stables, with grass or other green fodder, cut and hauled to them. This practice is very rapidly growing in favor in all localities where land is very high priced, where manure is largely used, where the finer class of animals are kept, and where for any reason it is desired to keep a large stock on a small place. It is the best foundation of what is called *High Farming*." As Courtney and Waring (1869:401) point out, the practice of "soiling" allows for the more efficient and productive use of acreage—with lands properly managed supporting four times the number of animals as on pastured lands.[52]

As Stilgoe (1982:19) notes, "each immigrant group brought its own attitudes toward land use along with specific crops," and distinctively different Yankee and Southern strategies—as well as German immigrant strategies—developed. Nonetheless, certain strategies worked better than others, and as Stilgoe (1982: 193) also notes, "in the Ohio Valley, every Yankee came to terms with southern agriculture practice because most Yankees adopted southern attitudes toward cattle raising. Southerners and Yankees alike built cowpens and raised cattle for eastern markets." According to Stilgoe (1982:196) "[the Ohio] Valley, really exhibited no regional characteristic; it was neither southern nor Yankee. It was surely not agricultural in the sense known to easterners who raised only a few head of cattle each year, and it was strangely fenced, at least according to the standards of Pennsylvanians. But it prospered, chiefly because of cattle raising." Clearly farms in greater Southern Illinois in the 1830s and 1840s were not considered "High Farming", and the practice of "soiling" neat cattle in the district was probably not practiced by the common dirt farmer in early Illinois. Open range production of cattle was common among both Southern and Yankee families during these early years.

In contrast to the commercial production of beef cattle, every family—whether Southern or Yankee or German in origin—had their dairy cow or two. Such cows were a necessity for daily life in the nineteenth century. Of far greater value to the farm family than milk, was the production of butter, a commodity necessary for cooking a variety of foodstuffs. Unlike the beef cattle noted above, the family's dairy cattle (or more often, family cow) were more apt to be

[52] As Courtney and Waring (1869:401) point out, pastured land required two acres per cow versus one-half of an acre per cow "where the system is practiced in the best manner."

given special attention over the winter months and "soiled." For continued, quality milk production during the winter months, the dairy cow required more than simple "maintenance" rations.

Corn ensilage (which consisted of an ideal mix of roughage and moisture) was a practical solution to the problems of wintering over cattle, and its general acceptance resulted in a shift and general acceptance of "soiling" beef cattle (and a shift to stall feeding practices). As Bailey (1881:26) noted, "ensilage is therefore the most economical method of soiling" and, in essence, eliminated winter for those farmers raising dairy cattle. Agricultural histories of the Midwest emphasize the development of corn ensilage practices—and the subsequent development of the silo—during the later years of the nineteenth century (Noble 1984).[53] Early work in the 1860s by Adolph Reihlen, a German beet-sugar grower and refiner near Stuttgart represent the first documented use of ensilage processes with corn. Soon thereafter, French agricultural journals were carrying articles on the ensilage of corn during the 1870s. Chief among these writers and researchers was an Auguste Goffart, whose writings were "credited with popularizing ensilage procedures in France" (Noble 1984:70). Goffart's "writings were collected in book form in 1877… [and] "translated into English in 1879 as *The Ensilage of Maize and Other Green Fodder Crop"* (Noble 1984:70). By the middle 1870s, several individuals in the United States, such as Manley Miles at the University of Illinois, were also conducting experiments with the use of corn silage. Experiments during these early years consisted of the use of variously lined, sub-surface storage pits for use as silos.

By the early 1880s, the concept of placing corn fodder into a subsurface pit (or "silo") was being extolled by such American agricultural writers as John Bailey (1881) and Byron Halsted (1881).[54] Fresh fodder placed in an air-tight environment such as that located in a subsurface pit preserved well, and cattle thrived on it. Both Bailey (1881) and Halsted (1881:211) described masonry-lined linear pits in use as being about 75' long, 9' wide at the top, 6' wide at the bottom, and 6' deep. Halsted's (1881:223) linear pits were divided into sections which facilitated the filling and removal of the fodder in a methodical manner (Halsted 1881: 223). The pits described by Halsted (1881), which were often 10 rods (or 160') in length divided into 5 sections, were clearly being used for commercial dairy farms.

What is significant with the late century development of ensilage practices in France (and the United States) is the practice of making silage from corn (or maize). As several early writers noted, the practice of storing grains in subterranean pits clearly had ancient precedent. Miles (1895:19) noted that "the first detailed description of the process, by an English author, so far as I can learn, was given by Prof. J. F. W. Johnston, in a paper "On the Feeding Qualities of the Natural and Artificial Grasses in different states of dryness" published in the *Transactions of the Highland and Agricultural Society of Scotland*," for 1843-45." In an accompanying footnote, Miles (1895:19) made reference to a German article from 1842 which may have been the original source article (Greiswald 1842). Miles notes that "an abstract of Prof. Johnston's

[53] The silo is the air-tight container that the silage was stored in. It is interesting to note that the term "silo" does not appear in either Webster's 1854 or 1878 dictionaries (Webster 1854, 1878). The term does appear in his 1892 dictionary, which defines silo as "an air tight pit for packing away green fodder for winter use" (Webster 1878:328).

[54] Halsted (1881) draws heavily *and freely* from Bailey's earlier work.

description of the *sour hay process* was published in Stephens' 'Book of the Farm'" (1844) and that Stephens (1844) noted that "this process is fully described by *Grieswald* (1842); and a translation of the passage is given in Stevens' large work."

Storage of grains in underground pits was common practice throughout Europe during the Iron Age (and earlier). This practice persisted through the modern era in parts of the Old World, including Scotland (cf. Shepherd and Shepherd 1989).[55] Similarly, the process of using salt as a preservative for making a *sour hay or grass feed* in subterranean pits may have been in practiced in northern Europe for many years prior to the appearance of the practice in the early 1840s scientific literature. The practice of northern Europeans (particularly Germans) of storing salted grasses and hay in airtight, underground storage pits as feed to over-winter dairy cattle may have been a traditional practice for many years. Northern European practices of preserving cabbage with salt was an ancient process very similar to that undertaken with grass and hay and described in this early 1840s scientific work. How long this sour hay production in northern Europe was being practiced is unknown, but it may have been practiced for many generations prior to the 1840s by traditional peasant farmers.[56] As Halsted (1881:210) noted, the placing of fodder (whether corn, hay, or sugar beets) into pits was a common practice among the "French, Belgian, and German farmers [who] have adopted the plan, and some extensive stock feeders have used it largely with the most favorable results." Although corn fodder was not common in Europe, Halsted (1881:222-23) noted that beets and other root crops were preserved in underground pits as sour fodder for many years in Hungary.

Cattle often consumed a variety of other root crops (such as turnips, beets, carrots, potatoes) and fruits (such as pumpkins). As discussed earlier, traditional methods for storing such root crops and fruits for human consumption was in small storage pits. Writing in the mid-nineteenth century, Flint (1859:461) described the process of storing cabbages (and other crops) underground for cattle feed. He noted that at "in various parts of Europe, cabbage is used for stock… [and] the ordinary modes of harvesting and preserving cabbages are well known. For a portion of our product we have taken a method but little known, and we therefore communicate it to our readers. We dig a ditch, about twelve inches in depth, and of suitable width to receive the head of a cabbage. This is to be on dry ground. In this we place all the inferior part of the crop—the small heads and even clusters o leaves, before formed into heads; the leaves being well folded and pressed together, and the roots of the stumps point upwards. When arranged in this manner, the dirt removed from the ditch is used to fill up all the vacant spaces, and to raise a ridge over the row of roots, concealing them entirely from view. Here they remain till wanted for use or market, in the spring. Then, on opening the ditch, we have found most of the small heads materially increased I size, and those when placed there, consisting of loose leaves, converted into heads of moderate size; and all delightfully white, crispy, and delicate. The better portion of the crop, not needed for winter use, may be preserved, as well as the poorer part of it, in the same manner" (Flint 1854:451).

[55] Shepherd and Shepherd (1989) document the presence of a sub-conical clay and stone-lined pits constructed for the storage of oats in rural Scotland, and radio-carbon dated to sometime between 1525 and 1705. This pit was 1.8m in diameter, was slightly greater than 1.10m in depth, and was shaped like an inverted and truncated cone. The sides and floor were lined with stone set into a clay base or lining.

[56] The practice of "salting" hay as it was placed within a barn's loft has been documented among German immigrant farmers in Illinois—and may be related to this practice of sour hay production.

Similarly, Flint (1859:470) notes that "carrots are not easily injured by moderate frost… [and are best] if left on the ground in heaps of small size… the safest way for them is to be placed in alternate layers with straw, either in cellars or in stacks or heaps, which on the approach of sever cold, are covered over with straw and earth of sufficient thickness to protect them from frost. Care must be taken to admit the air as soon as the weather becomes mild. When carrots are kept in pits, it is not safe to put more than a few bushels together. It is said that eight pounds of hay, and seventy or eighty pounds of carrots per day, will keep a laboring horse in first-rate condition."

As such, it would appear that the storage of root crops, and soured hays and/or grasses for cattle feed may have been common knowledge by northern European immigrants during the 1830s-40s. How wide-spread this knowledge was among non-immigrant settlers is not known. Clearly, county histories make note of early settlers raising pumpkins in conjunction with corn, and storing the multitude of pumpkins for livestock consumption. As such, it would appear that the use of large storage pits for the storage of root crops and fruits for livestock consumption may have been fairly widespread by the 1830s-40.

Subsurface pits used for the storage of root crops and/or sour fodder such as those described by Halsted (1881) have not been documented archaeologically. Generally, the long linear pits described by Halsted (1881) were associated with large commercial dairy and beef livestock farmers. Nonetheless, the same technology was adaptable to the small-scale farmer. Miles (1895) notes that a pit 10' square by 10' deep would hold approximately 5 tons of cut grass, and after salted, covered, and allowed to partially ferment and settle, it could be again filled—with the result that the pit could contain as much as 10 tons of soured fodder. Feeding 20-30 pounds of sour feed per cow in conjunction with chopped straw—as suggested by Miles (1895) suggests that the pits located at these southern Illinois sites (such as the Jones/Hillerman Site)—although slightly smaller than the 10' square by 10' deep—would hold sufficient quantity of sour fodder to over winter a couple of dairy cattle without difficulty.

As Halsted (1881) noted, the burial of root crops for preservation was a common practice particularly among central and eastern European farmers. Large, deep circular pits such as those documented by Gums (1991**)** at the Whitley Site in Edgar County may actually represent agricultural storage pits for livestock. The clustered location of these pits at the Whitley Site adjacent to a fence line or field edge collaborates this interpretation. Similarly, the linear arrangement of the three rectangular pits at the Krapp Site may suggest the same strategy of clustered fodder pits arranged in the center of the feed lot similar to that discussed by Halsted (1881) (Mansberger, Phillippe, and Stratton 1998). If these pits represent agricultural storage pits, it would suggest that the farmer may have been specializing in dairy production or the feeding of beef cattle, on a small scale. The appearance of one or two of these pits at rural sites in southern Illinois potentially reflect the storage of sour fodders for the consumption of the family's dairy cow(s) during the winter months.

So, why is this feature type is seldom found in more northern Illinois? Perchance, the use of sour fodders was not practiced in northern Illinois. Or, for some reason, more formal storage cellars—such as the rectangular agricultural cellar discussed by Mansberger (Mansberger,

Phillippe, and Stratton 1998) were used instead. These features look similar to domestic cellars, but are located away from the domestic component, the fill in these features is often light in color (lacking organic debris from the kitchen) and low in artifact density. Examples of these features (many of which appear to lack key-hole entrances) have been found at the William Miller Site (11DW333; Mansberger and Halpin 1991), the suburban David Davis Site in Bloomington, and at the Scott Site in rural St. Clair County (Scott Air Force Base Project). These agricultural cellars are often difficult to interpret as the agricultural function of these cellars is difficult to recognize. Besides the lighter colored fills, they often contain low artifact density dominated by male oriented artifacts. Understanding the distribution of surface middens is very important in identifying an agricultural cellar.

Another explanation for the lack of these pits in more northern Illinois may have to do with the abundant availability of prairie grasses in more northern reaches of the state. Illinois was known for its "lush prairie grass that made… [it] a natural grazing area" (Whitaker 1975:19). By the 1830s, portions of the state had already become known as a cattle producing area, shipping feeders east to be finished in Ohio and Pennsylvania for eastern markets, and fattened cattle south particularly to markets in New Orleans. Besides the Ohio River Valley, several regions in Illinois (particularly those in the central part of the state, sucha s Champaign, Madison, Sangamon, and Morgan Counties) developed extensive cattle raising industries each dominated by a couple prominent men. It is no coincidence that these areas were known for their extensive prairie lands. Perhaps the colder winters may have necessitated the use of a larger, more substantial barn and the larger barns and more readily available grasses allowed for the storage of dried hay in the barn's loft—sufficient hay was easily available for carrying the livestock over the winter months. Prairie lands in the north were abundant, and the storage of cut grasses and hay above ground was more common, allowing for the ready availability of fodder necessary to over-winter livestock in the north.

Summary Conclusions. To summarize, the Jones/Hillerman Site appears to represent the remains of a small, short-term farmstead and/or rural house site occupied during the middle nineteenth century (circa 1835-45), and potentially tied to the entrepreneurial exploits of Mr. Hillerman, and the nearby river port landing named after him. The archaeological research value of this site lies in the comparative value it has with other contemporary farmstead and/or rural house sites in the region.

The small feature cluster and artifacts recovered from the Jones/Hillerman Site represent domestic materials associated with a latter 1830s and middle 1840s occupation—which coincide with the Jones and Hillerman years of ownership. The artifacts recovered from the site appear to indicate the presence of a family, as the presence of children (as indicated by the presence of a doll) and presumably women (as indicated by the presence of sewing items, particularly straight pins) are both documented at the site. Although rural activities such as wood chopping (indicated by an ax), cow grazing (indicated by a large cow bell), and the presence of wagons or buggies (indicated by the singletree hook) are documented by the artifacts, such activities do not necessarily indicate farming activities—and can just as easily be associated with a rural home site (and not a farm). Additionally, hunting and/or protection by way of firearms (indicated by the presence of a gunflint) were also documented at this site.

Two of the more recent artifacts recovered from the site are 1) the small undecorated whiteware plate with an impressed Davenport mark and the date code for 1840, and 2) a small milk glass or "Prosser" button[57]—both recovered from Feature 1. Both painted and printed flow blue ceramic tablewares were common. Such wares appear to be common during the early 1840s. Having said this, some of the artifacts (such as the edge decorated and painted table and teawares) appear to be slightly earlier—potentially extending back into the later 1820s and/or early 1830s. As such, it would appear that either 1) the occupation of this site pre-dates the 1838 initial land purchase from the U.S. Government (by a squatter family), or 2) the occupants of this site brought some older ceramics with them when they settled the site during the later 1830s.

Several of the artifacts—such as the wine bottle seal from an imported Bordeaux wine, the yellowware baker, and the relatively new style Davenport plate noted above—suggests the presence of a family with some financial means and ability to purchase upscale and/or newly fashionable consumer goods. The presence of loop shank (marked "TRIBLE GILT COLOUR" and "RICH GILT COLOUR") and stamped (marked "SHEPARDSON & RICHARDS") metal buttons (predominately brass) over sew-through bone buttons by at least 5 to 1 also suggests this same consumer pattern for more formal and/or upscale fashionable goods. Similarly, the alcohol containers recovered from this site (represented by wine bottles and a decanter) document an upscale alcohol consumption pattern. One of the bottles of wine (or more likely brandy) had an impressed seal on its shoulder that was impressed "LEZUNE & DUMAS / BORDEAUX." It is interesting to speculate that not only was the wine or brandy imported, but if it was drank in circa 1840-45, it would have been a well-aged, nearly 20- to 25-year-old bottle of liquor by that date.

Additionally, the archaeological research at the Jones/Hillerman Site—combined with the research conducted at other sites in the region—has given us new insights into the settlement history of the region, as well as the state as a whole. These insights sometimes contrast with our current perceptions of the lifeways of the early settlers. Current perceptions often characterize the pioneer farm family as backwoodsmen living a subsistence lifestyle—for example, a recent exhibit of Illinois in Lincoln's era notes that "into the 1840s, the typical farm did not produce large surpluses to be sold at market; *most production was for domestic use*" (Goeble-Bain 2009:10).[58] In many instances, this may indeed be true, but the isolated nature and "subsistence" level of production undertaken by many of these farm families has been over emphasized in the literature. As McCorvie (1987:257) has noted "subsistence agriculture is frequently interpreted to imply that the farmer produced only those items or products that were necessary to sustain life or that the products that the farmer was able to raise barely sustained him and his family. Both are inaccurate depictions of early settlers in southern Illinois" (McCorvie 1987:257). The

[57] Prosser buttons, often referred to as "milk glass" buttons, first appear in circa 1840 (Sprague 2002). These buttons were developed in 1840 and appear almost immediately within the archaeological record from the early 1840s onward (Spraque 2002).

[58] Goeble-Bain (2009:10) acknowledges that "while the majority of this work was for household use, their surpluses provided an important source of barter goods and even cash." Similarly, McCorvie (1987:239), in summarizing the archaeology of the Huggins Site, notes that "the frequency and types of cultural material from within the pit features [at this site] clearly document the transformation of the Huggins site from a self-sufficient Upland South homestead during the early nineteenth century to a prosperous rural farmstead during the late nineteenth and twentieth centuries."

perception of these farmsteads as being completely isolated from the modern world is inaccurate and misleading—at least in regards to production and consumer goods. It is true that there was often a social isolation—particularly for women, but even the basic "subsistence" farmstead was tied into a national market economy. Clearly the amount of "surplus" produced was a matter of scale or degree, but unless you were the most isolated of backwoodsmen, most farmers of the 1830s-60s were producing surplus to be used for barter or actual cash sale, and were purchasing a wide range of consumer goods manufactured from locations around the globe. Even during the most "incipient" of times, these early farm families were tied to a national economy with access to a variety of consumer goods--albeit goods that might not be within the economic reach of the site inhabitants. The diversity of these goods varies by site, and potentially reflects differences in levels of participation within this national market economy.[59] Agricultural strategies differed dramatically from their eastern cousins living in more established regions. Much of the early rural economy focused on diversified farming practices that included livestock and cereal grain production. In most cases, until the development of the railroads in the 1850s, poor transportation corridors made bulk commodities difficult to transport to market. Farmers—whether from the south, Mid-Atlantic, or north often adapted a production strategy that relied heavily on corn and hog production—with the corn being converted into either distilled liquor (whiskey) or hogs, both of which were more easily transported to markets. It is no wonder that several midwestern communities became hog processing and whiskey producing centers during the middle nineteenth century. And conversely, one must also not under-estimate the proximity of other sites to well-used, easily accessible transportation corridors such as the Ohio River. Sites such as the Jones/Hillerman Site—located within close proximity to river landing communities such as Hillerman—had easy access to intra-regional transportation systems, allowing for the ready transport of other bulkier commodities (such as cattle) to distant markets (such as New Orleans).

Unfortunately, the archival research was not able to determine who occupied the Jones/Hillerman Site, and thus the cultural affiliation of the site's occupants is not known. Often, sites located within southern Illinois—especially those with faunal remains represented predominately by hog bones—are quickly assigned an Upland South attribution. McCorvie et al. (1989:34) notes that

> the majority of the rural farmsteads in the Shawnee Hills are associated with the Upland South cultural tradition, which originated in the Upper South during the eighteenth century and spread into southern Illinois during the early nineteenth century with the arrival of immigrants from the southern states (McCorvie 1987:251). One of the characteristics of the Upland South tradition is a reliance upon a diversified farming complex which utilized a variety of resources, enabling each farmstead to be self-sufficient in relation to food (McCorvie 1987:261). Faunal and botanical remains recovered from pre-1850 features at the

[59] Currently, as historical archaeologists in Illinois, we have problems recognizing the variability and diversity in these assemblages—which are not as homogenous as some researchers would like to believe. The historic record strongly suggests that differences in economic accessibility to these goods were present among the early settlers of the region—and that such differences were tied to both economic accessibility as well as regional and/or ethnic desire or demand for such goods.

> Upland South Davis and Huggins farmsteads indicated an early reliance upon domestic animals, particularly the pig, supplemented by the hunting of wild animals and the collection of herbs and other plants that could be used for medicine and dyes (Lutzow 1988b; McCorvie 1987). Cows, sheep, goats, and domestic plants were underrepresented as these items represented economic investments to be sold at market.

The Upland South model relied heavily on an analysis of faunal remains (and the preponderance of hog remains combined with wild food stuffs) for its identifying characteristics. As McCorvie (1987:144) has noted, the faunal assemblages from this region are often characterized by "domestic pig and chicken with wild game and fish occasionally supplementing their diet. This is similar to the dietary pattern observed by Hilliard (1972) in much of the 'Old South' region of the United States …" It is true that the faunal assemblage from the Jones/Hillerman Site is dominated by hog remains, and our initial assumption was that this site was potentially occupied by an Upland South family. But when you start comparing faunal assemblages from around the state, *all* such assemblages seem to be dominated by pork remains—whether occupied by a family from an Upland South, Mid-Atlantic, or New England background.

The Upland South model used by McCorvie and others to explain the archaeology of southern Illinois has not been as useful as originally postulated. During the early to middle nineteenth century, all families settling in Illinois were utilizing an adaptive strategy that relied heavily on timber resources and diversified farming. The region was particularly well suited for corn and hog production—a strategy that was adapted by a wide range of families from varied backgrounds. Similarly speaking, all Upland South families did not pursue similar agricultural strategies—and well-to-do families from the Upland South clearly pursued strategies that were markedly different in methods and scale than their poorer brethren. Although Upland South families were coming from a geographical region with a common heritage, some families were much more successful than others. There clearly was diversity within the economic well-being of Upland South families, and although the less well-to-do families might fit the "Upland South archaeological model" presented by previous researchers, the wealthier families might not exhibit a similar archaeological signature. Many Mid-Atlantic and New England folk—as well as recent immigrants—were quick to adapt to the local conditions, and adopted the diversified farming techniques utilized by the Upland South families. These poorer Mid-Atlantic dirt farmers may exhibit an archaeological signature similar to that postulated by the Upland South model. Obviously, the high presence of pork remains should not be the sole reason for assigning an attribution of Upland South to the heritage of a site's occupants. The presence of beef in these assemblages, although clearly lower in individual specimens, is present at most sites. Cattle obviously represented more investment, and were associated with the wealthier families—but pork was of importance to *all* settlers in Illinois by the middle nineteenth century.[60] As such, archaeologists need to more closely look at the utility of the Upland South model for interpreting

[60] The smaller body size of hogs and their ability to mature quicker (to reach a butchering weight sooner than beef) also potentially biases the archaeological record towards pork remains showing up in the archaeological record over beef—and it may be more realistic to compare relative values of pork and beef by body mass based on the minimum number of individuals at these sites for a better assessment of meat consumed at a site (at least on rural sites, where entire carcasses are presumably consumed).

the variability in the archaeological record of Illinois. We must look at a site's structure and artifact assemblages with much closer scrutiny to begin to address such issues as cultural background—at least from an archaeological perspective.

The archaeological excavations of the Jones/Hillerman Site (11Mx306) have contributed to our understanding of middle-nineteenth-century agricultural practices and rural lifeways in this region of the state. These excavations have documented the remains of a short-term, middle-nineteenth-century farmstead within rural Massac County. The excavations have given us new insights into both the activities conducted at this location as well as the quality of life associated with the individuals that occupied the site and used these artifacts. The ceramics and glassware present suggest the presence of a moderately successful, literate, and potentially professional family. Although individually the site seems relatively unimpressive, its significance lies in its comparative value with other contemporary farmstead sites in the region and has allowed us to address a wide range of questions relating to the diversity of agricultural strategies used by various ethnic and socio-economic groups during the nineteenth century. This view from the Jones/Hillerman Site—as depicted by the artifacts, contrasts drastically with the perception of the "frontier" conditions depicted by many researchers, and future comparisons between sites such as the Jones/Hillerman Site with other sites within the region and the state will prove intriguing. Variation in the archaeological record does exist, in both site structure and in material culture used by (and/or discarded by) the site occupants. In an effort to better understand ourselves, identifying and explaining that diversity and/or variation is what we, as archeologists are trying to do.

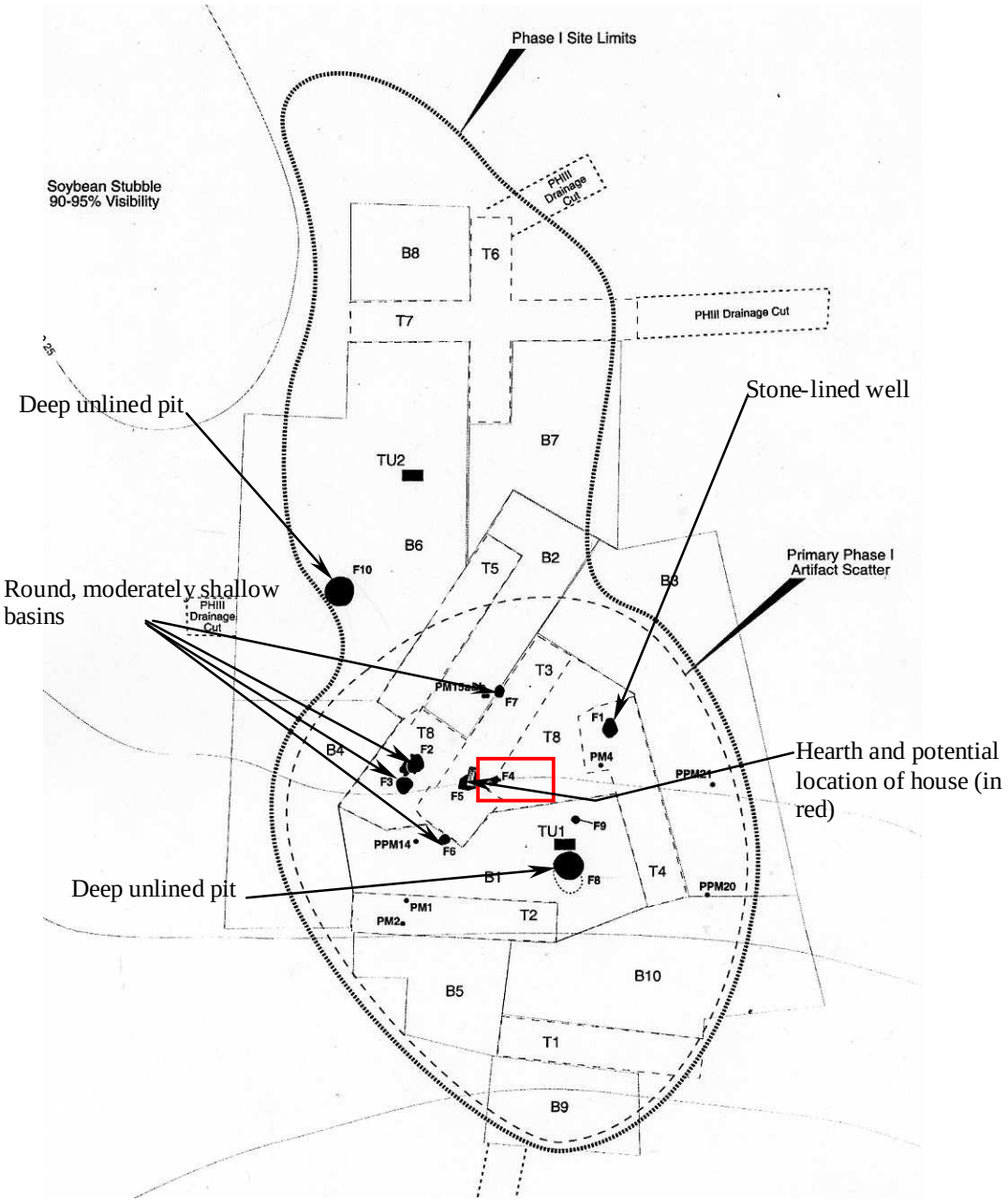

Figure 87. Plan view of the Gaston/Dorsey (11Sa539) site (rural Saline County, Illinois) illustrating the location of features around the suspected location of the house. The well is located near the corner of the house. A potential earlier well or deep storage pit is located in a similar location, albeit located adjacent to a different corner of the house. Located in an arc, on the opposite side of the house from the well(s) was a series of shallow storage basins. A deep storage pit or potential well was located on the outer edge of the domestic activity area—potentially associated with a agricultural outbuilding.

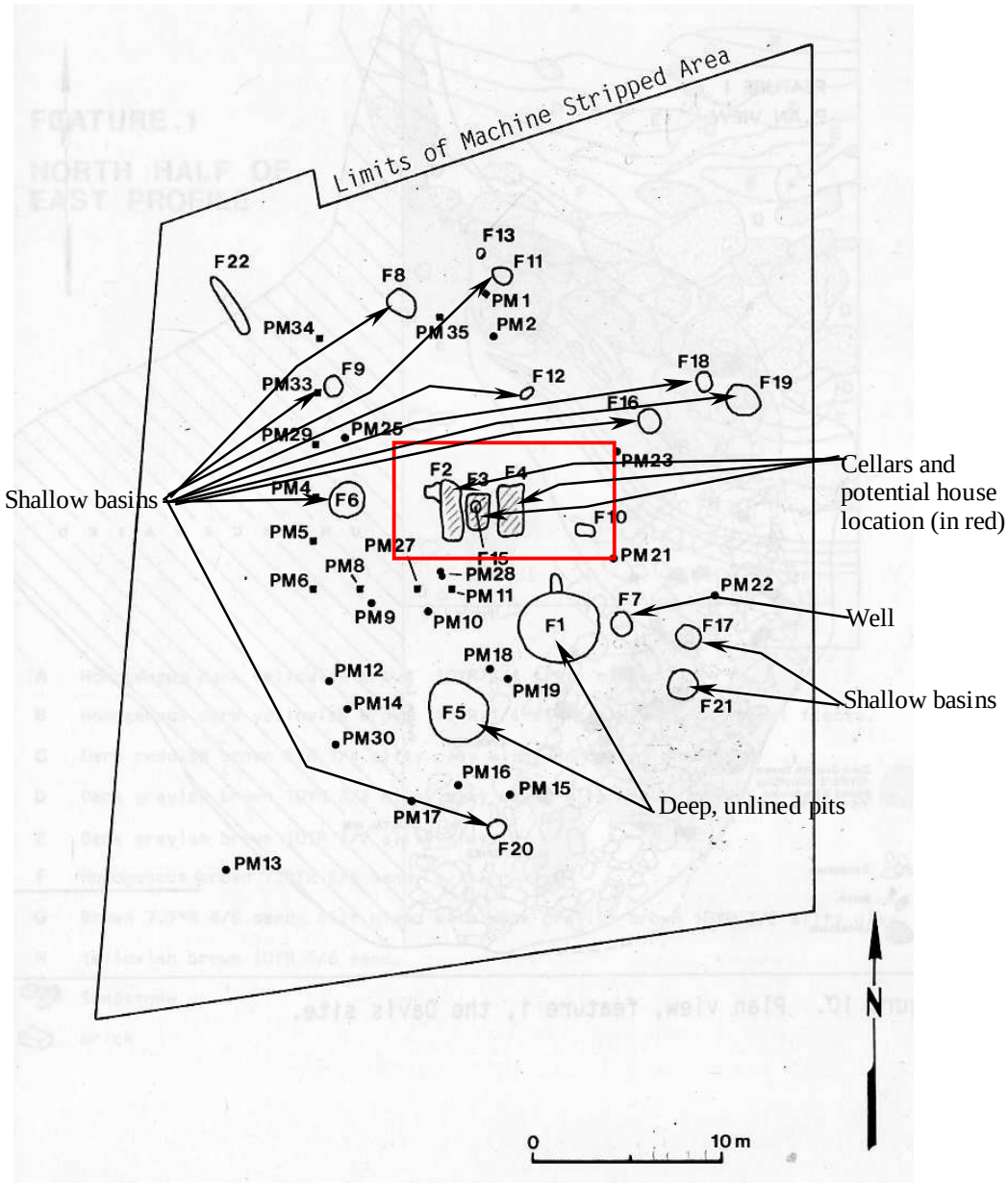

Figure 88. Plan view of the Davis Site (rural Perry County, Illinois) illustrating the location of features around the suspected location of the house. Features consisted of three small cellars (suspected as being beneath a dwelling), a well, two deep unlined shafts (suspected as being earlier wells or large storage pits), and a multitude of shallow storage basins, which are located in a circle completely surrounding the house. Additional potential features include a smudge pit (Feature 13), a long narrow trench with in situ burning (Feature 22), and a shallow, flat bottomed rectangular pit of unknown function (Feature 10).

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APPENDIX I
LOT PROVENIENCE

Phase II Fieldwork

Lot Number	Provenience
1	Surface (Controlled Surface Collection, 5/13/08)
2	Surface (Backhoe trenching, 5/14/08)
3	Feature 1, surface
4	Feature 1, East Half
5	Feature 2, surface
6	Feature 2, East Half
7	Feature 2, West half profile wall
8	Feature 3, surface
9	Feature 3, Southeast Quarter
10	Feature 3, Northwest Quarter
11	Features 4 and 5, surface (predominately Feature 4)
12	Feature 4, East Half
13	Feature 5, East Half
14	Feature 6, surface
15	Feature 7, North Half
16	Feature 3 and 7 juncture, North section [Probably Feature 7 fill]
17-19	Lot numbers not assigned

Phase III Fieldwork

Lot Number	Provenience
20	Surface (Mitigation fieldwork)
21	Feature 1, West Half
22	Feature 2, West Half
23	Feature 3, Northeast Quarter, Upper fill
24	Feature 3, Northeast Quarter, Lower fill
25	Feature 3, Southwest Quarter, Upper fill
26	Feature 3, Southwest Quarter, Lower fill
27	Feature 3 (Fill adjacent to Feature 7)
28	Feature 4, West Half
29	Feature 5, West Half
30	Feature 6, Southwest Quarter, Level 1
31	Feature 6, Southwest Quarter, Level 2
32	Feature 6, South Half, Backhoe Trench
33	Feature 7, South Half
34	Feature 8, East Half, Level 1

APPENDIX II
LOT INVENTORY

Lot 1

1 undecorated pearlware
30 undecorated whiteware
2 sponge decorated (blue) whiteware
7 painted (flow blue) whiteware
3 edge decorated (blue) whiteware
1 edge decorated (green) whiteware
4 painted (polychrome, small floral) whiteware
1 printed (blue) whiteware
3 undecorated porcelain
2 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) (Vessel 40)
1 edge decorated (red) whiteware plate (scalloped edge) (Vessel 44)
1 Rockingham-glazed yellowware pitcher (Vessel 56)
1 salt glazed stoneware
1 aqua container glass
1 gunflint (small sized; heavily re-worked or utilized and burned; British-style blade type)
1 forged nail fragment
1 machine cut nail fragment
1 iron strap
5 prehistoric flakes
1 sandstone
1 prehistoric pebble core/chopping tool
1 prehistoric adze

Lot 2

6 undecorated pearlware
43 undecorated whiteware
4 edge decorated (green) whiteware
9 edge decorated (blue) whiteware
3 undercoated porcelain
1 annular decorated whiteware
1 printed (dark blue) pearlware
7 painted (polychrome, small floral) whiteware
20 painted (flow blue) whiteware
1 undecorated whiteware (with impressed backstamp "[Henderso]n & Gaines / 45 / [Ca]nal St." with impressed "Dav[enport]" over an anchor; impressed "3" along left side of anchor referring to an undetermined 1830s date of manufacture)
5 sponge decorated (blue) whiteware saucer (Vessel 1)
6 salt glazed stoneware shouldered jar (hand turned) (Vessel 8)
2 sponge decorated (yellow) whiteware cup (Vessel 16)
2 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (Vessel 22)

1 painted (polychrome, small floral pattern using earth tone palette and blue lined rim and stems) whiteware cup (unscalloped edge) (Vessel 24)
3 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) (Vessel 40)
1 edge decorated (red) whiteware plate (scalloped edge) (Vessel 44)
2 painted (polychrome, overglaze) porcelain cup (handled) (Vessel 48)
1 painted (flow blue; large floral pattern) whiteware saucer (polygonal/Gothic shape) (Vessel 50)
2 sponge decorated (blue and red, rainbow pattern) whiteware saucer (Vessel 52)
3 printed (flow blue) whiteware (polygonal shape) plate/small plate (Vessel 53)
1 edge decorated (unmolded and blue painted line only) whiteware small plate (unscalloped edge) (Vessel 54)
1 Rockingham-glazed yellowware pitcher (Vessel 56)
1 printed (red) whiteware cup (Vessel 58)
1 printed (blue) whiteware saucer (Vessel 59)
2 painted (polychrome, large floral with green lined rim) whiteware saucer (Vessel 61)
1 undecorated whiteware plate (approximately 8-8½" diameter) (Vessel 62)
2 edge decorated (blue) whiteware platter (non-scalloped edge; polygonal/Gothic shape) (Vessel 63)
3 painted (monochrome blue, large floral pattern with blue lined rim) whiteware saucer (Vessel 64)
2 salt glazed stoneware
2 aqua window glass
1 sandstone
1 soft mud brick/daub
2 chert flakes
1 mussel shell

Lot 3
4 undecorated whiteware plate (8 ½" diameter, impressed "DAVENPORT / GRANITE" with impressed anchor and year stamp for 1840) (Vessel 5)
1 sponge decorated (blue) whiteware tea pot/sugar bowl lid (approximate 3" diameter) (Vessel 6)
2 salt glazed stoneware jug (hand turned) (Vessel 7)
3 salt glazed stoneware shouldered jar (hand turned) (Vessel 8)
1 soft mud brick/daub

Lot 4
2 sponge decorated (blue) whiteware
1 bone
1 soft mud brick/daub
1 machine cut nail

Lot 5
1 iron ax
1 bone

Lot 6
2 undecorated whiteware
2 undecorated pearlware
1 redware
1 sponge decorated (red and blue) whiteware
1 sponge decorated (blue) whiteware saucer (Vessel 1)
1 edge decorated (blue) whiteware plate (scalloped edge) (Vessel 2)
1 printed (blue) whiteware saucer (round, with fluted interior) (Vessel 3)
7 annular decorated whiteware waster bowl (Vessel 4)
3 wire
1 machine cut nail fragment
3 bone
1 soft mud brick/daub
1 iron cow bell

Lot 7
1 painted (monochrome blue, broad floral pattern) pearlware
1 iron singletree hook

Lot 8
6 undecorated whiteware
1 undecorated porcelain
1 painted (polychrome, small floral pattern) whiteware
1 bone
1 flat tanged, iron handled table knife
1 machine cut nail
1 unidentified iron
1 stamped 4-hole iron button (0.64" diameter; impressed "SHEPARDSON & RICHARDS" on reverse)
2 sponge decorated (yellow) whiteware saucer (Vessel 9)
2 edge decorated (green) whiteware plate (scalloped edge) (Vessel 10)
1 edge decorated (blue) whiteware plate (scalloped edge) (Vessel 11)
1 painted (flow blue, large floral pattern) whiteware cup (Gothic shape) (Vessel 12)
1 painted (flow blue, large floral pattern) whiteware saucer (Gothic shape) (Vessel 13)
1 painted (flow blue, large floral pattern) whiteware plate (Vessel 14)
1 relief decorated (unidentified pattern) whiteware cup (Vessel 15)
1 sponge decorated (yellow) whiteware cup (Vessel 16)
1 painted (brown lined rim) whiteware cup (Vessel 17)
1 undecorated yellowware serving bowl/baker (polygonal; finely potted) (Vessel 18)
1 redware bowl (hand turned, base only) (Vessel 19)
1 tumbler (clear/lead glass, polygonal with fluted sides, molded) (Vessel 20)

Lot 9
10 undecorated whiteware
1 printed (red) whiteware

1 painted (polychrome, small floral pattern) whiteware
1 aqua container glass
1 dark green/black container glass (heavily patinated)
9 aqua glass (melted) (cannot determine if container glass or window glass)
2 edge decorated (green) whiteware plate (scalloped edge) (Vessel 10)
2 edge decorated (green) whiteware plate (Vessel 21)
1 painted (polychrome, small floral pattern with green lined rim) whiteware saucer (scalloped edge) (Vessel 22)
3 painted (polychrome, small floral pattern) whiteware cup (unscalloped edge) (Vessel 23)
1 painted (polychrome, small floral pattern using earth tone palette and blue lined rim whiteware cup (unscalloped edge) (Vessel 24)
2 painted (polychrome, small floral pattern with black lined rim) whiteware saucer (Vessel 25)
2 edge decorated (blue) whiteware plate (scalloped edge) (Vessel 26)
2 printed (blue and green) whiteware cup (scalloped edge) (Vessel 27)
1 undecorated chamber pot lid (Vessel 28)
3 relief decorated porcelain cup (handled) (Vessel 29)
5 painted (overglaze polychrome) porcelain saucer (Vessel 30)
1 vial (aqua, dip molded, round, 1" diameter, pontiled, melted) (Vessel 31)
1 vial (aqua, 2-piece mold, round, 1 ½" diameter, pontiled, fragile lip) (Vessel 32)
1 wine bottle (dark green/black glass, applied seal only, which reads "DELUZE & DUMAS / BORDEAUX") (Vessel 33)
1 decanter (clear/lead glass, applied ringed neck only, short ¾" diameter neck) (Vessel 34)
20 soft mud brick/daub
49 bone
1 eggshell
2 unidentified iron concretions (nails?)
1 small mussel shell
2 mussel shell fragments
4 straight pins (round, dipped heads)
6 machine cut nail fragments (although fragmentary, all are small sized, approximately 1-2" in size)
1 iron upholstery tack
1 brass loop shank button (0.49" diameter; impressed on reverse "TRIPLE GILT / COLOUR")
1 loop shank button (approximately 0.70" diameter; potentially silver plated, corroded front, no marking on reverse)
1 brass loop shank button (0.68" diameter; illegible impressed mark on reverse)
1 twisted iron wire
2 unidentified iron "staples" (potentially door hardware)
1 unidentified iron (door hardware?)
1 unidentified lead (cast in an arc; in section is v-shaped with base ¼" wide, top ½" wide, ½" tall and 1 5/8" long)
1 rat-tail tanged iron table knife
2 prehistoric flakes

Lot 10

17 undecorated whiteware
2 painted (monochrome blue, large floral pattern) whiteware
3 painted (polychrome, large floral pattern) whiteware
2 painted (polychrome, small floral pattern) whiteware
1 painted (polychrome, small floral pattern) pearlware
3 redware
3 dark green/black container glass
11 edge decorated (green) whiteware plate (scalloped edge) (Vessel 10)
2 edge decorated (blue) whiteware plate (scalloped edge)(Vessel 11)
2 painted (flow blue, large floral pattern) whiteware cup (Gothic shape) (Vessel 12)
1 painted (flow blue, large floral pattern) whiteware plate (Vessel 14)
2 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (Vessel 22)
1 painted (overglaze polychrome) porcelain saucer (Vessel 30)
1 edge decorated (green) whiteware small plate (scalloped edge) (Vessel 35)
1 edge decorated (green) whiteware small plate (scalloped edge) (Vessel 36)
1 edge decorated (red) whiteware small plate (scalloped edge) (Vessel 37)
1 printed (red) whiteware cup (Vessel 38)
1 painted (polychrome, small floral pattern; earth tone palette) whiteware saucer (same pattern as Vessel 24) (Vessel 39)
3 printed (red and green) whiteware saucer (same pattern as Vessel 27) (Vessel 40)
3 painted (polychrome, small floral pattern with black lined rim) whiteware cup (Vessel 41)
1 painted (monochrome blue; small floral pattern) whiteware saucer (Vessel 42)
2 relief decorated ironstone serving vessel (handle only) (Vessel 43)
1 kaolin/white ball clay pipe stem
4 machine cut nail fragments
1 machine cut nail (?) with round pewter-like head (2 ½" long)
1 wire
2 straight pins (dipped heads)
1 bent/flattened copper wire or "cotter" pin
1 4-hole shell button (decorated; 0.36" diameter)
1 4-hole milk glass/Prosser button (0.44" diameter)
1 iron button/disk (1 ¼" diameter)
17 bone
2 mussel shell
8 soft mud brick/daub

Lot 11

12 undecorated whiteware
2 undecorated porcelain
2 edge decorated (green) whiteware plate (scalloped edge) (Vessel 10)
1 edge decorated (blue) whiteware plate (scalloped edge) (Vessel 11)
6 printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) (Vessel 27)
2 edge decorated (green) whiteware small plate (scalloped edge) (Vessel 35)

7 printed (red and green) whiteware saucer (scalloped edge) (Vessel 40)
1 edge decorated (red) whiteware plate (scalloped edge) (Vessel 44)
1 painted (polychrome, small floral; earth tone palette) whiteware saucer (Vessel 47)
1 machine cut nail (2 ¼" long)

Lot 12

1 undecorated porcelain
1 annular decorated whiteware
1 printed (blue) whiteware
10 undecorated whiteware
1 undecorated yellowware serving bowl/baker (polygonal; finely potted) (Vessel 18)
1 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (Vessel 22)
4 printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) (Vessel 27)
1 painted (overglaze polychrome) porcelain saucer (Vessel 30)
5 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) (Vessel 40)
1 edge decorated (red) whiteware plate (scalloped edge) (Vessel 44)
1 painted (polychrome, small floral pattern using earth tone palette and blue lined rim and stems) whiteware cup (unscalloped edge) (Vessel 24)
1 edge decorated (green) whiteware plate (scalloped edge) (Vessel 46)
1 iron wire
3 machine cut nail fragments
1 machine cut nail (2" long)
1 flat iron/sheet metal
2 chert cobble flakes/debitage

Lot 13

37 undecorated whiteware
3 aqua window glass (1.43mm, 1.39mm, 1.40mm in thickness)
1 printed (dark blue) pearlware
2 painted (polychrome, small floral pattern) whiteware
9 edge decorated (green) whiteware plate (scalloped edge) (Vessel 10)
3 edge decorated (green) whiteware plate (Vessel 21)
2 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (Vessel 22)
11 printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) (Vessel 27)
4 painted (overglaze polychrome) porcelain saucer (Vessel 30)
3 edge decorated (blue) whiteware small plate (scalloped edge) (Vessel 36)
6 painted (polychrome, small floral; earth tone palette) whiteware saucer (Vessel 47)
1 painted (polychrome, overglaze) porcelain cup (handled) (Vessel 48)
1 undecorated creamware chamber pot lid (Vessel 49)
20 bone
2 softmud brick/daub

4 machine cut nail fragments
1 machine cut nail (2 1/8" long)
2 charcoal

Lot 14

1 porcelain doll leg (painted brown shoe)
2 undecorated whiteware
7 bone
1 aqua glass (melted) (cannot determine if container glass or window glass)
1 indeterminate flat iron
1 indeterminate iron hook (forged)

Lot 15

16 undecorated whiteware
1 undecorated whiteware (with partial potential Davenport anchor backstamp)
3 undecorated porcelain
1 printed (dark blue) pearlware
3 aqua window glass (1.28mm, 1.33mm, 1.18mm in thickness)
3 sponge decorated (yellow) whiteware saucer (Vessel 9)
1 edge decorated (blue) whiteware plate (scalloped edge) (Vessel 11)
1 painted (flow blue, large floral pattern) whiteware cup (Gothic shape) (Vessel 12)
1 painted (flow blue, large floral pattern) whiteware saucer (Gothic shape) (Vessel 13)
3 painted (flow blue, large floral pattern) whiteware plate (Vessel 14)
1 tumbler (clear/lead glass, polygonal with fluted sides, molded) (Vessel 20)
1 vial (aqua, 2-piece mold, round, 1 ½" diameter, pontiled, fragile lip) (Vessel 32)
1 edge decorated (blue) whiteware small plate (scalloped edge) (Vessel 36)
1 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) (Vessel 40)
1 edge decorated (red) whiteware plate (scalloped edge) (Vessel 44)
1 painted (flow blue; large floral pattern) whiteware saucer (polygonal/Gothic shape) (Vessel 50)
1 painted (polychrome, small floral pattern) whtieware saucer (Vessel 51)
4 sponge decorated (blue and red, rainbow pattern) whiteware saucer (Vessel 52)
2 printed (blow blue) whiteware (polygonal shape) (Vessel 53)
3 edge decorated (unmolded and blue painted line only) whiteware small plate (unscalloped edge) (Vessel 54)
1 edge decorated (minimally molded and blue painted line only) whiteware small plate (unscalloped edge) (Vessel 55)
2 Rockingham-glazed yellowware pitcher (Vessel 56)
1 lamp globe (clear/lead glass, frosted exterior, ground blow-over-mold rim) (Vessel 57)
1 salt glazed stoneware jug (hand turned) (Vessel 58)
1 sandstone
8 soft mud brick/daub (maybe whitewashed?)
2 metal concretions
1 machine cut nail fragment
1 machine cut nail (4" long)

5 bone
1 mussel shell
2 straight pins (dipped heads)
1 5-hole bone button (0.48" diameter)
1 brass loop shank button (0.70" diameter; impressed "RICH GOLD COLOUR" on reverse side; loop shank broken off and/or hole punched through the center of the button)
1 chert flake

Lot 16
2 undecorated whiteware
2 painted (monochrome red, large floral pattern) whiteware
1 painted (polychrome, large floral) whiteware
1 clear/lead glass tableware
1 aqua window glass (1.38mm thick)
2 edge decorated (green) whiteware plate (scalloped edge) (Vessel 10)
2 undecorated yellowware serving bowl/baker (polygonal; finely potted) (Vessel 18)
1 painted (polychrome, small floral pattern using earth tone palette and blue lined rim and stems) whiteware cup (unscalloped edge) (Vessel 24)
1 edge decorated (green) whiteware small plate (scalloped edge) (Vessel 35)
3 edge decorated (blue) whiteware small plate (scalloped edge) (Vessel 36)
1 painted (flow blue; large floral pattern) whiteware saucer (polygonal/Gothic shape) (Vessel 50)
1 machine cut nail (2 ½" long)
1 softmud brick/daub
1 bone
1 chert flake

Lot 20
3 undecorated whiteware
1 printed (red and green) whiteware
1 salt glazed stoneware
1 food jar? (clear/lead, wide mouth, approx. 1 ½"-2" diameter rim, rolled lip, badly melted) (Vessel 65)

Lot 21
7 undecorated whiteware
1 printed (red) whiteware
2 printed (green) whiteware
2 printed (red and green) whiteware
1 painted (polychrome) whiteware
1 painted (monochrome, blue) whiteware
1 undecorated whiteware? (burned)
3 yellowware
1 salt glazed stoneware
1 salt glazed stoneware shouldered jar (hand turned) (Vessel 8)
1 edge decorated (blue) whiteware scalloped edge small plate/plate (Vessel 66)

3 sponge decorated (yellow) painted (polychrome, peacock pattern?) London Urn shape whiteware cup (Vessel 67)
9 painted? flow blue whiteware saucer/small plate (Vessel 68)
1 painted polychrome whiteware saucer (Vessel 69)
2 sponge decorated yellow whiteware (burned) (Vessel 70)
1 redware hand-turned approx. 7" diameter base bowl (Vessel 71)
1 indeterminate small vessel (salt?) (clear/lead glass) (Vessel 72)
1 percussion cap
1 iron chain link (broken)
10 machine cut nail fragments
3 iron straps (approx. 1" wide)
14 daub
1 peach pit (burned)
52 bone
1 biface with worked edges
1 bifacial thinning flake
8 broken flakes
4 fire cracked rock

Lot 22
2 undecorated pearlware
4 undecorated whiteware
2 annular decorated whiteware
2 painted polychrome whiteware
1 salt glazed stoneware (jug?)
2 yellowware
1 edge decorated (blue) whiteware plate (scalloped edge) (Vessel 2)
1 edge decorated (blue) lined rim (Vessel 73)
4 edge decorated (green) scalloped edge pearlware small plate/plate (Vessel 74)
6 handled hand-turned yellowware small jug (Vessel 75)
2 leather
8 machine cut nail fragments
4 sheet metal/can fragments
44 bone
3 charcoal
1 flake with utilized edge, thermally altered
1 fire cracked rock

Lot 23
2 undecorated porcelain
14 undecorated whiteware
5 printed (red) whiteware
1 printed (dark blue) whiteware
1 printed (green) whiteware
1 painted (monochrome green) broad floral whiteware
4 painted (polychrome) small floral whiteware

13 aqua container glass
7 dark green/black container glass
1 edge decorated (blue) whiteware plate (scalloped edge) (Vessel 11)
2 painted (flow blue, large floral pattern) whiteware saucer (Gothic shape) (Vessel 13)
2 undecorated yellowware serving bowl/baker (polygonal; finely potted) (Vessel 18) [with impressed backstamp "Bennett Bros."]
2 edge decorated (green) whiteware plate (Vessel 21)
7 printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) (Vessel 27)
11 painted (overglaze polychrome) porcelain saucer (Vessel 30)
1 edge decorated (blue) whiteware scalloped edge small plate (Vessel 36)
3 painted (polychrome, small floral pattern with black lined rim) whiteware cup (Vessel 41)
7 painted (monochrome blue; small floral pattern) whiteware saucer (Vessel 42)
3 painted, monochrome (blue) broad floral whiteware [same pattern as Vessel 42] (Vessel 76)
1 painted polychrome lined edge whiteware (Vessel 77)
2 5-hole bone buttons (.64" diameter)
1 5-hole bone button (.66" diameter)
1 5-hole bone button (.67" diameter)
1 4-hole shell button (.4" diameter)
2 4-hole shell buttons (.36" diameter)
1 brass loop shank button (.55" diameter)
1 green faceted glass bead (1/4" x ¼")
1 brass watch chain fob or jewelry (?)
1 stoneware marble (.61" diameter)
2 lead musket balls (.43" diameter)
1 brass screw (saw handle?)
1 brass straight pin (1 1/8" long)
1 brass jewelry (?)
2 iron wire/pin
1 machine cut nail (2 1/8" long)
2 machine cut nails (2 ¼" long
1 machine cut nail (1 ¾" long)
15 machine cut nail fragments
13 aqua container glass
7 dark green/black container glass
85 bone
2 eggshell
10 daub
30 charcoal

Lot 24

5 painted (overglaze polychrome) porcelain saucer (Vessel 30)
12 vial (aqua, round) (Vessel 79)
1 4-hole bone button (.63" diameter)

2 machine cut nails (1 ¼" long)
1 machine cut nail (1/2" long)
5 machine cut nail fragments
9 daub (20g)
29 bone
20 charcoal
1 utilized flake

Lot 25

13 undecorated whiteware
1 printed (brown) whiteware
1 painted (dark blue) whiteware
1 printed (flow blue) whiteware
1 painted (flow blue) whiteware
2 painted polychrome small floral whiteware
5 aqua (almost dark green/black-odd) window glass
2 dark green/black container glass
2 container glass? (burned)
1 sponge decorated (yellow) whiteware saucer (Vessel 9)
3 edge decorated (green) whiteware plate (scalloped edge) (Vessel 10)
1 redware bowl (hand turned, base only) (Vessel 19)
1 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (Vessel 22)
5 painted (overglaze polychrome) porcelain saucer (Vessel 30)
7 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) (Vessel 40)
1 painted (polychrome, small floral pattern with black lined rim) whiteware cup (Vessel 41)
1 painted (monochrome blue; small floral pattern) whiteware saucer (Vessel 42)
6 painted, monochrome (blue) broad floral whiteware [same pattern as Vessel 42] (Vessel 76)
1 painted polychrome lined edge whiteware (Vessel 77)
1 vial (aqua, round) (Vessel 79)
2 printed (dark blue) pearlware cup (Vessel 80)
1 printed (black) whiteware saucer (Vessel 81)
1 undecorated (painted?) whiteware cup Vessel 82)
4 painted polychrome small floral whiteware saucer (Vessel 83)
12 medicine/chemical bottle (aqua, concave base, approximately 2" x 1½" base, hand blown?, folded exterior lip, pontiled (Vessel 84)
9 medicine bottle (clear possibly concave base similar to Vessel 84, folded exterior lip) (Vessel 86)
1 brass loop shank button "IMPERIAL STANDARD" (.71" diameter)
1 5-hole bone button (.6" diameter)
1 4-hole shell button with pie crust decoration (.36" diameter)
1 brass thimble (1" long)
1 iron scissors (small)
1 iron teaspoon bowl

1 iron teaspoon handle
1 brass buckle
3 machine cut nails (1 ½" long)
21 machine cut nail fragments
1 cast iron Dutch oven lid (see lot 32)
1 forged iron "hilt" for fork/knife
10 unidentified iron
1 iron wire
256 bone
10 mussel shell
12 charcoal
38 daub/burned soil (232g)

Lot 26

2 undecorated whiteware
5 clear container glass
1 aqua container glass
2 dark green/black container glass
1 undecorated yellowware serving bowl/baker (polygonal; finely potted) (Vessel 18)
2 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (Vessel 22)
1 wine bottle (dark green/black glass, applied seal only, which reads "DE LUZE & DUMAS / BORDEAUX") (Vessel 33)
1 edge decorated (blue) whiteware small plate (scalloped edge) (Vessel 36)
1 painted (polychrome, small floral pattern with black lined rim) whiteware cup (Vessel 41)
6 edge decorated (red) whiteware plate (scalloped edge) (Vessel 44)
5 medicine bottle (clear possibly concave base similar to V. 84, folded exterior lip (Vessel 86)
1 brass thimble, open ended (1/2" long)
1 blue faceted glass bead (1/4" x ¼")
1 bone lice comb
2 worked copper (spectacle frames)
1 iron scissor handle
3 machine cut nail fragments
1 iron wire
1 iron hinge
28 daub (112g)
26 charcoal
139 bone
2 eggshell

Lot 27

1 printed (dark blue) pearlware
26 undecorated whiteware
2 printed (blue) whiteware
2 printed (brown) whiteware

4 printed (red) whiteware
2 painted polychrome whiteware
2 Rockingham glazed stoneware
1 redware
2 aqua window glass
1 clear container glass
1 dark green/black container glass
2 sponge decorated (yellow) whiteware saucer (Vessel 9)
1 painted (flow blue, large floral pattern) whiteware cup (Gothic shape) (Vessel 12)
2 painted (flow blue, large floral pattern) whiteware saucer (Gothic shape) (Vessel 13)
4 undecorated yellowware serving bowl/baker (polygonal; finely potted) (Vessel 18)
4 edge decorated (green) whiteware plate (Vessel 21)
1 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (Vessel 22)
4 painted (polychrome, small floral pattern with black lined rim) whiteware saucer (Vessel 25)
1 undecorated chamber pot lid (Vessel 28)
1 painted (overglaze polychrome) porcelain saucer (Vessel 30)
8 edge decorated (green) whiteware small plate (scalloped edge) (Vessel 35)
1 edge decorated (blue) whiteware scalloped edge small plate (Vessel 36)
3 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) (Vessel 40)
3 painted (polychrome, small floral pattern with black lined rim) whiteware cup (Vessel 41)
4 edge decorated (red) whiteware plate (scalloped edge) (Vessel 44)
2 vial (aqua, round, folded exterior lip pontiled (Vessl 79)
1 painted (polychrome, small floral) whiteware saucer (Vessel 83)
1 sponge decorated (red and blue rainbow pattern) whiteware saucer (Vessel 87)
1 painted (polychrome broad/large floral) whiteware saucer (Vessel 88)
2 Rockingham glazed yellowware indeterminate vessel (Vessel 89)
2 brass loop shank buttons (embossed "ORANGE COLOUR"; 0.95" diameter)
1 brass loop shank button (concave; embossed "RICH COLOUR"; 0.68" diameter)
1 brass loop shank button (0.55" diameter)
1 iron loop shank button (0.85" diameter)
1 4-hole iron button (0.52" diameter)
1 4-hole shell button (0.4" diameter)
1 brass pin (1 3/4'" long)
2 brass pins (1" long)
1 brass pin fragment
2 graphite pencils
1 kaolin pipe bowl
1 iron kitchen knife with bone handle (9 ½" long)
1 iron serving spoon (8" long)
1 iron kitchen/table utensil handle
1 iron buckle (1 1/8" x ½")
1 iron rivet
1 machine cut nail (2 ½" long)

1 machine cut nail (2” long)
1 machine cut nail (1 ½” long)
12 machine cut nail fragments
3 iron needles (?) (2 ¼” long)
2 worked iron (threaded?) (1/8” x 1/8”)
8 mussel shell
1 terrestrial snail shell
36 bone
8 daub (64g)
20 charcoal

Lot 28

14 undecorated whiteware
1 painted monochrome whiteware
1 painted green whiteware
2 aqua window glass
1 aqua container glass
1 clear container glass
1 edge decorated and embossed green whiteware scalloped edge plate (Vessel 90)
3 painted polychrome small floral whiteware (cornflower pattern) (Vessel 91)
1 painted lined edge whiteware rim only saucer (vessel 92)
10 printed red whiteware scalloped edge saucer (same pattern as red/green wares; and may actually be red/green?) (Vessel 93)
1 5-hole bone button (.63” diameter)
1 kaolin pipe bowl
1 machine cut nail (1 ½” long)
1 machine cut nail (1 ¾” long)
4 machine cut nail fragments
1 iron forged nail
1 unidentified iron
1 machine cut tack
2 daub (7g)
11 charcoal
1 bone
1 terrestrial snail shell
1 flake

Lot 29

157 undecorated whiteware
1 undecorated whiteware embossed “HENDER…/ 45 / CANAL / NEW ORLE[ANS]”
12 painted polychrome small floral whiteware
3 aqua container glass
4 painted (polychrome, small floral; earth tone palette) whiteware saucer (Vessel 47)
8 painted (polychrome, overglaze) porcelain cup (handled) (Vessel 48)
7 edge decorated red whiteware approximately 9” diameter scalloped edge plate (Vessel 94)
12 edge decorated blue embossed whiteware scalloped edge plate (Vessel 95)

14 edge decorated green embossed whiteware scalloped edge plate (Vessel 96)
4 printed dark blue pearlware small plate (Vessel 97)
17 painted polychrome overglaze porcelain saucer (Vessel 98)
3 painted polychrome small floral green lined edge whiteware saucer (Vessel 99)
6 painted polychrome large floral whiteware saucer (Vessel 100)
1 painted polychrome small floral with green lined edge whiteware scalloped edge saucer (Vessel 101)
7 painted polychrome small floral unlined rim whiteware saucer (Vessel 102)
11 painted polychrome broad floral ocher hue whiteware (Vessel 103)
39 printed red and green whiteware scalloped edge saucer (Vessel 104)
23 printed (red and green) whiteware cup (London Urn shape, embossed backstamp stylized "3"?) (Vessel 105)
40 painted (polychrome small floral, unlined rim) whiteware cup (London Urn shape) (Vessel 106)
4 painted (polychrome, ocher hues) whiteware cup [mate with Vessel 103] (Vessel 107)
1 redware jar (interior shelf for lid; hand turned) (Vessel 108)
6 wine bottle (dark green/black, round, applied shoulder seal, applied string lip finish) (Vessel 109)
6 indeterminate tableware (clear/lead, wheel engraved decoration) [possibly an oil lamp font?) (Vessel 110)
1 indeterminate bottle (clear/lead, burned) (Vessel 111)
1 iron 2-prong serving fork with antler handle (9" long)
1 antler handle (perform or blank cut to size but not utilized as handle; 4 ¼" long)
1 1-hole bone button (.4" diameter)
1 gun flint (amber, blade type; 3/4" x 5/8")
1 brass/copper shaker top?
1 graphite stylus
2 straight pins
1 iron buckle (1 1/8" x 1 ¼")
1 iron buckle (5/8" x ¾")
1 iron horseshoe (4 7/8" x 5 ¼")
1 iron stirrup (5 ¼" x 4 ½")
1 iron "cap" or lid (1 ¼" diameter)
1 iron pail handle (1/4" diameter)
1 iron pail handle/wire (?)
1 iron half circle sheet metal (5 1/8" x 2 ¾")
4 iron sheet metal (thin)
1 iron strap with nails (1 1/8" wide)
1 iron tubing (rolled into a spout?)
8 machine cut nails (2 ¼" long)
8 machine cut nails (2" long)
10 machine cut nails (1 ½" long)
36 machine cut nail fragments
15 aqua window glass
15 daub (260g)
60 charcoal

61 bone
26 eggshell
4 terrestrial snail shells
1 whetstone (large piece of sandstone)
1 flake
1 broken flake

Lot 30
1 undecorated whiteware approximately 8" diameter plate (Vessel 112)
2 machine cut nail fragments

Lot 31
1 undecorated whiteware approximately 8" diameter plate (Vessel 112)
2 painted polychrome whiteware saucer (Vessel 113)

Lot 32
1 salt/Albany slipped stoneware approximately 10" diameter hand turned jar (Vessel 114)
1 iron Dutch oven lid 12" diameter) (see lot 25)

Lot 33
13 undecorated whiteware
2 printed green whiteware
4 yellowware
1 yellow spongeware
1 aqua window glass
5 clear/lead potentially frosted container glass
1 clear and white layered glass
5 painted (flow blue; large floral pattern) whiteware saucer (polygonal/Gothic shape) (Vessel 50)
8 painted (polychrome, small floral pattern) whiteware saucer (Vessel 51)
4 printed (blow blue) whiteware (polygonal shape) plate/small plate (Vessel 53)
2 Rockingham-glazed yellowware pitcher (Vessel 56)
1 edge decorated red and molded whiteware scalloped edge small plate (Vessel 115)
1 edge decorated blue and molded whiteware scalloped edge small plate (Vessel 116)
1 painted flow blue lined rim whiteware gothic shape cup (Vessel 117)
1 painted flow blue lined edge whiteware plate (Vessel 118)
1 sponge decorated red whiteware saucer (Vessel 119)
1 sponge decorated (blue) whiteware saucer (Vessel 120)
1 1 brass pin (1 1/8" long)
1 4-hole bone button (.67" diameter)
1 5-hole bone button (.67" diameter)
1 pewter spout (?)
1 kaolin pipe bowl
5 machine cut nail fragments
8 brick/daub (102g)
10 charcoal

9 bone
1 terrestrial snail shell

Lot 34
3 undecorated whiteware

APPENDIX III

CERAMIC AND GLASS VESSELS BY FEATURE

Surface Collection

Vessel 59	printed (red) whiteware cup
Vessel 60	printed (blue) whiteware saucer (?)
Vessel 61	painted (polychrome, large floral with green lined rim) whiteware saucer
Vessel 62	undecorated whiteware plate (approximately 8-8½" diameter) [similar to Vessel 5 which was impressed "DAVENPORT / GRANITE" with impressed anchor and year stamp for 1840)
Vessel 63	edge decorated (blue) whiteware platter (non-scalloped edge; polygonal/Gothic shape)
Vessel 64	painted (monochrome blue, large floral pattern with blue lined rim) whiteware saucer
Vessel 65	food jar? (clear/lead, wide mouth, approximately 1 ½"-2" diameter rim, rolled lip, badly melted

Feature 1

Vessel 5	undecorated whiteware plate (8½" diameter, impressed "DAVENPORT / GRANITE" with impressed anchor and year stamp for 1840)
Vessel 6	sponge decorated (blue) whiteware teapot/sugar bowl lid (approximate 3" diameter)
Vessel 7	salt glazed stoneware jug (hand turned)
Vessel 8	salt glazed stoneware shouldered jar (hand turned)
Vessel 66	edge decorated (blue) whiteware plate/small plate (scalloped edge)
Vessel 67	sponge decorated (yellow) painted (polychrome, peacock pattern?, London urn shape) whiteware cup
Vessel 68	painted (?) (flow blue) whiteware saucer/small plate
Vessel 69	painted (polychrome) whiteware cup (approximate 6" diameter)
Vessel 70	sponge decorated (yellow) whiteware saucer (burned)
Vessel 71	redware hand turned bowl (approximate 7" diameter base)
Vessel 72	indeterminate small vessel (clear/lead) (salt?)

Feature 2

Vessel 1	sponge decorated (blue) whiteware saucer
Vessel 2	edge decorated (blue) whiteware plate (scalloped edge)
Vessel 3	printed (blue) whiteware saucer (round, 5 ¾" diameter, with fluted interior) [This pattern has a grape leaf and vine border with grape clusters. It is very similar to an unidentified pattern in Williams (1986:466) which she calls the "Bird at Fountain" pattern.]
Vessel 4	annular decorated whiteware waster bowl
Vessel 73	edge decorated (blue) whiteware saucer/small plate
Vessel 74	edge decorated (green) pearlware saucer/small plate (scalloped edge)
Vessel 75	undecorated yellowware hand turned small jug (handled)
Vessel 76	painted (monochrome blue, broad floral pattern) whiteware saucer [similar to Vessel 42]
Vessel 77	painted (polychrome, large floral pattern, lined edge) whiteware saucer
Vessel 78	indeterminate jar (clear/lead, approximate 1 ½" diameter base, wide mouth)
Vessel 79	vial (aqua, round, folded exterior lip, pontiled)

Feature 3

Vessel 9	sponge decorated (yellow) whiteware saucer
Vessel 10	edge decorated (green) whiteware plate (scalloped edge)
Vessel 11	edge decorated (blue) whiteware plate (scalloped edge)
Vessel 12	painted (flow blue, large floral pattern) whiteware cup (Gothic shape)
Vessel 13	painted (flow blue, large floral pattern) whiteware saucer (Gothic shape)
Vessel 14	painted (flow blue, large floral pattern) whiteware plate
Vessel 15	relief decorated (unidentified pattern) whiteware cup
Vessel 16	sponge decorated (yellow) whiteware cup
Vessel 17	painted (brown lined rim) whiteware cup [probably polychrome, small floral pattern]
Vessel 18	undecorated yellowware serving bowl/baker (polygonal; finely potted)
Vessel 19	redware bowl (hand turned, base only)
Vessel 20	tumbler (clear/lead glass, polygonal with fluted sides, molded)
Vessel 21	edge decorated (green) whiteware plate
Vessel 22	painted (polychrome, large floral pattern with green lined rim) pearlware saucer (non-scalloped edge; unidentified impressed mark in the form of a "propeller" within a circle]
Vessel 23	painted (polychrome, small floral pattern) whiteware cup (unscalloped edge)
Vessel 24	painted (polychrome, small floral pattern using earth tone palette and blue lined rim and stems) whiteware cup (unscalloped edge) [possibly manufactured by Adams; see Vessel 39]
Vessel 25	painted (polychrome, small floral pattern with black lined rim) whiteware saucer
Vessel 26	edge decorated (blue) whiteware plate (scalloped edge)
Vessel 27	printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846. Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820," which seems about ten-twenty years too early.]
Vessel 28	undecorated chamber pot
Vessel 29	relief decorated porcelain cup (handled)
Vessel 30	painted (overglaze polychrome) porcelain saucer
Vessel 31	vial (aqua, dip molded, round, 1" diameter, pontiled, melted)
Vessel 32	vial (aqua, 2-piece mold, round, 1 ½" diameter, pontiled, fragile lip)
Vessel 33	wine bottle (dark green/black glass, applied seal only, which reads "DE LUZE & DUMAS / BORDEAUX") [circa 1820-24]
Vessel 34	decanter (clear/lead glass, applied ringed neck with fragile lip finish, short neck; ¾" diameter neck)
Vessel 35	edge decorated (green) whiteware small plate (scalloped edge)
Vessel 36	edge decorated (blue) whiteware small plate (scalloped edge)
Vessel 37	edge decorated (red) whiteware small plate (scalloped edge)
Vessel 38	printed (red) whiteware cup [identified as the SOWER pattern; manufactured by William Adams (Snyder 1997:28). Snyder (1997:28) suggests that the pattern was "circa 1835." Godden (1964:21) indicates that this impressed mark was used on earthenwares from circa 1800-1864. Williams (1978:526) illustrates a different pattern as the SOWER pattern.]

Vessel 39 painted (polychrome, small floral pattern; earth tone palette) whiteware saucer (with impressed "ADAMS" mark; same pattern as Vessel 24) [Godden (1964:21) indicates that this impressed mark was used on earthenwares from circa 1800-1864.]

Vessel 40 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846.) [Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820," which seems about ten-twenty years too early.]

Vessel 41 painted (polychrome, small floral pattern with black lined rim) whiteware cup

Vessel 42 painted (monochrome blue; small floral pattern) whiteware saucer

Vessel 43 relief decorated ironstone serving vessel (handle only)

Vessel 80 printed (dark blue) pearlware cup

Vessel 81 printed (black) whiteware saucer/small plate

Vessel 82 undecorated (painted?) outflowing rim cup

Vessel 83 painted (polychrome, small floral pattern) whiteware saucer

Vessel 84 medicine/chemical bottle (aqua, concave base, approximate 2' x 1 ½" base, hand blown?, rolled/folded to exterior lip finish, pontiled)

Vessel 85 no vessel assigned

Vessel 86 medicine bottle (clear, concave base similar to Vessel 84, folded to exterior rim, very badly burned)

Vessel 87 sponge decorated (red and blue, rainbow pattern) whiteware saucer

Vessel 88 painted (polychrome, broad/large floral pattern) whiteware saucer

Vessel 89 Rockingham glazed yellowware indeterminate vessel [no rim present; may represent fragment of Vessel 56]

<u>Features 3 and 7</u>

Vessel 10 edge decorated (green) whiteware plate (scalloped edge)

Vessel 18 undecorated yellowware serving bowl/baker (polygonal; finely potted)

Vessel 24 painted (polychrome, small floral pattern using earth tone palette and blue lined rim and stems) whiteware cup (unscalloped edge) [possibly manufactured by Adams; see Vessel 39]

Vessel 35 edge decorated (green) whiteware small plate (scalloped edge)

Vessel 36 edge decorated (blue) whiteware small plate (scalloped edge)

Vessel 50 painted (flow blue; large floral pattern) whiteware saucer (polygonal/Gothic shape)

<u>Feature 4</u>

Vessel 18 undecorated yellowware serving bowl/baker (polygonal; finely potted)

Vessel 22 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (non-scalloped edge; unidentified impressed mark in the form of a "propeller" within a circle]

Vessel 24 painted (polychrome, small floral pattern using earth tone palette and blue lined rim and stems) whiteware cup (unscalloped edge) [possibly manufactured by Adams; see Vessel 39]

Vessel 27 printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846. Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820," which seems about ten-twenty years too early.]
Vessel 30 painted (overglaze polychrome) porcelain saucer
Vessel 40 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846.) [Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820," which seems about ten-twenty years too early.]
Vessel 44 edge decorated (red) whiteware plate (scalloped edge)
Vessel 46 edge decorated (green) whiteware plate (scalloped edge)
Vessel 90 edge decorated and embossed (green) whiteware plate (scalloped edge)
Vessel 91 painted polychrome small floral whiteware (cornflower pattern) saucer
Vessel 92 painted lined edge whiteware rim only saucer
Vessel 93 printed red whiteware scalloped edge saucer (same pattern as red/green wares; and may actually be red/green?)

Features 4 and 5 (Surface)
Vessel 11 edge decorated (blue) whiteware plate (scalloped edge)
Vessel 35 edge decorated (green) whiteware small plate (scalloped edge)

Feature 5
Vessel 10 edge decorated (green) whiteware plate (scalloped edge)
Vessel 21 edge decorated (green) whiteware plate
Vessel 22 painted (polychrome, large floral pattern with green lined rim) pearlware saucer (non-scalloped edge; unidentified impressed mark in the form of a "propeller" within a circle]
Vessel 27 printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846. Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820," which seems about ten-twenty years too early.]
Vessel 30 painted (overglaze polychrome) porcelain saucer
Vessel 36 edge decorated (blue) whiteware small plate (scalloped edge)
Vessel 47 painted (polychrome, small floral; earth tone palette) whiteware saucer
Vessel 48 painted (polychrome, overglaze) porcelain cup (handled)
Vessel 49 undecorated creamware chamber pot lid
Vessel 94 edge decorated red whiteware approximately 9" diameter scalloped edge plate
Vessel 95 edge decorated blue embossed whiteware scalloped edge plate
Vessel 96 edge decorated green embossed whiteware scalloped edge plate
Vessel 97 printed dark blue pearlware small plate
Vessel 98 painted polychrome overglaze porcelain saucer
Vessel 99 painted polychrome small floral green lined edge whiteware saucer
Vessel 100 painted polychrome large floral whiteware saucer
Vessel 101 painted polychrome small floral with green lined edge whiteware scalloped edge saucer

Vessel 102 painted polychrome small floral unlined rim whiteware saucer
Vessel 103 painted polychrome broad floral ocher hue whiteware
Vessel 104 printed red and green whiteware scalloped edge saucer
Vessel 105 printed red and green whiteware London Urn shape embossed backstamp stylized ”3”? cup
Vessel 106 painted polychrome small floral whiteware London Urn shape unlined rim cup
Vessel 107 painted polychrome ocher hues whiteware cup [mate with Vessel 103]
Vessel 108 redware interior shelf for lid hand turned jar
Vessel 109 wine bottle (dark gree/black, round, applied shoulder seal, applied string lip finish)
Vessel 110 indeterminate tableware (clear/lead, wheel engraved decoration) [possibly an oil lamp font?)
Vessel 111 indeterminate bottle (clear/lead, burned)

Feature 6
Vessel 112 undecorated whiteware approximately 8” diameter plate
Vessel 113 painted polychrome whiteware saucer
Vessel 114 salt/Albany slipped stoneware approximately 10” diameter hand turned jar

Feature 7
Vessel 9 sponge decorated (yellow) whiteware saucer
Vessel 11 edge decorated (blue) whiteware plate (scalloped edge)
Vessel 12 painted (flow blue, large floral pattern) whiteware cup (Gothic shape)
Vessel 13 painted (flow blue, large floral pattern) whiteware saucer (Gothic shape)
Vessel 14 painted (flow blue, large floral pattern) whiteware plate
Vessel 20 tumbler (clear/lead glass, polygonal with fluted sides, molded)
Vessel 32 vial (aqua, 2-piece mold, round, 1 ½” diameter, pontiled, fragile lip)
Vessel 36 edge decorated (blue) whiteware small plate (scalloped edge)
Vessel 40 printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp “E. W…”; same pattern as Vessel 27) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846.) [Snyder (1997:171-172) suggests that this pattern was manufactured “circa 1820,” which seems about ten-twenty years too early.]
Vessel 44 edge decorated (red) whiteware plate (scalloped edge)
Vessel 50 painted (flow blue; large floral pattern) whiteware saucer (polygonal/Gothic shape)
Vessel 51 painted (polychrome, small floral pattern with stylized “dots” for flowers) whiteware saucer
Vessel 52 sponge decorated (blue and red, rainbow pattern) whiteware saucer
Vessel 53 printed (flow blue) whiteware (polygonal shape)
Vessel 54 edge decorated (unmolded and blue painted line only) whiteware small plate (unscalloped edge)
Vessel 55 edge decorated (minimally molded and blue painted line only) whiteware small plate (unscalloped edge)
Vessel 56 Rockingham-glazed yellowware pitcher
Vessel 57 lamp globe (clear/lead glass, frosted exterior, ground blow-over-mold rim)

Vessel 58	salt glazed stoneware jug (hand turned)
Vessel 115	edge decorated red and molded whiteware scalloped edge small plate
Vessel 116	edge decorated blue and molded whiteware scalloped edge small plate
Vessel 117	painted flow blue lined rim whiteware gothic shape cup
Vessel 118	painted flow blue lined edge whiteware plate
Vessel 119	sponge decorated red whiteware saucer
Vessel 120	sponge decorated blue whiteware saucer

APPENDIX IV

CERAMIC AND GLASS VESSELS BY SITE

Vessel 1	sponge decorated (blue) whiteware saucer
Vessel 2	edge decorated (blue) whiteware plate (scalloped edge)
Vessel 3	printed (blue) whiteware saucer (round, 5 ¾" diameter, with fluted interior) [This pattern has a grape leaf and vine border with grape clusters. It is very similar to an unidentified pattern in Williams (1986:466) which she calls the "Bird at Fountain" pattern.]
Vessel 4	annular decorated whiteware waster bowl
Vessel 5	undecorated whiteware plate (8½" diameter, impressed "DAVENPORT / GRANITE" with impressed anchor and year stamp for 1840)
Vessel 6	sponge decorated (blue) whiteware teapot/sugar bowl lid (approximate 3" diameter)
Vessel 7	salt glazed stoneware jug (hand turned)
Vessel 8	salt glazed stoneware shouldered jar (hand turned)
Vessel 9	sponge decorated (yellow) whiteware saucer
Vessel 10	edge decorated (green) whiteware plate (scalloped edge)
Vessel 11	edge decorated (blue) whiteware plate (scalloped edge)
Vessel 12	painted (flow blue, large floral pattern) whiteware cup (Gothic shape)
Vessel 13	painted (flow blue, large floral pattern) whiteware saucer (Gothic shape)
Vessel 14	painted (flow blue, large floral pattern) whiteware plate
Vessel 15	relief decorated (unidentified pattern) whiteware cup
Vessel 16	sponge decorated (yellow) whiteware cup
Vessel 17	painted (brown lined rim) whiteware cup [probably polychrome, small floral pattern]
Vessel 18	undecorated yellowware serving bowl/baker (polygonal; finely potted) [with impressed mark "Bennett Bros."]
Vessel 19	redware bowl (hand turned, base only)
Vessel 20	tumbler (clear/lead glass, polygonal with fluted sides, molded)
Vessel 21	edge decorated (green) whiteware plate
Vessel 22	painted (polychrome, large floral pattern with green lined rim) pearlware saucer (non-scalloped edge; unidentified impressed mark in the form of a "propeller" within a circle]
Vessel 23	painted (polychrome, small floral pattern) whiteware cup (unscalloped edge)
Vessel 24	painted (polychrome, small floral pattern using earth tone palette and blue lined rim and stems) whiteware cup (unscalloped edge) [possibly manufactured by Adams; see Vessel 39]
Vessel 25	painted (polychrome, small floral pattern with black lined rim) whiteware saucer
Vessel 26	edge decorated (blue) whiteware plate (scalloped edge)
Vessel 27	printed (blue and green) whiteware cup (scalloped edge; same pattern as Vessel 40) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846. Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820," which seems about ten-twenty years too early.]
Vessel 28	undecorated chamber pot
Vessel 29	relief decorated porcelain cup (handled)
Vessel 30	painted (overglaze polychrome) porcelain saucer
Vessel 31	vial (aqua, dip molded, round, 1" diameter, pontiled, melted)

Vessel 32	vial (aqua, 2-piece mold, round, 1 ½" diameter, pontiled, fragile lip)
Vessel 33	wine bottle (dark green/black glass, applied seal only, which reads "DE LUZE & DUMAS / BORDEAUX") [circa 1820-24]
Vessel 34	decanter (clear/lead glass, applied ringed neck with fragile lip finish, short neck; ¾" diameter neck)
Vessel 35	edge decorated (green) whiteware small plate (scalloped edge)
Vessel 36	edge decorated (blue) whiteware small plate (scalloped edge)
Vessel 37	edge decorated (red) whiteware small plate (scalloped edge)
Vessel 38	printed (red) whiteware cup [identified as the SOWER pattern; manufactured by William Adams (Snyder 1997:28). Snyder (1997:28) suggests that the pattern was "circa 1835." Godden (1964:21) indicates that this impressed mark was used on earthenwares from circa 1800-1864. Williams (1978:526) illustrates a different pattern as the SOWER pattern.]
Vessel 39	painted (polychrome, small floral pattern; earth tone palette) whiteware saucer (with impressed "ADAMS" mark; same pattern as Vessel 24) [Godden (1964:21) indicates that this impressed mark was used on earthenwares from circa 1800-1864.]
Vessel 40	printed (red and green) whiteware saucer (scalloped edge) (partial printed backstamp "E. W…"; same pattern as Vessel 27) [identified as the BELZONI pattern; manufactured by Enoch Wood and Son, circa 1818-1846.) [Snyder (1997:171-172) suggests that this pattern was manufactured "circa 1820," which seems about ten-twenty years too early.]
Vessel 41	painted (polychrome, small floral pattern with black lined rim) whiteware cup
Vessel 42	painted (monochrome blue; small floral pattern) whiteware saucer
Vessel 43	relief decorated ironstone serving vessel (handle only)
Vessel 44	edge decorated (red) whiteware plate (scalloped edge)
Vessel 45	No Vessel
Vessel 46	edge decorated (green) whiteware plate (scalloped edge)
Vessel 47	painted (polychrome, small floral; earth tone palette) whiteware saucer
Vessel 48	painted (polychrome, overglaze) porcelain cup (handled)
Vessel 49	undecorated creamware chamber pot lid
Vessel 50	painted (flow blue; large floral pattern) whiteware saucer (polygonal/Gothic shape)
Vessel 51	painted (polychrome, small floral pattern with stylized "dots" for flowers) whiteware saucer
Vessel 52	sponge decorated (blue and red, rainbow pattern) whiteware saucer
Vessel 53	printed (flow blue) whiteware (polygonal shape)
Vessel 54	edge decorated (unmolded and blue painted line only) whiteware small plate (unscalloped edge)
Vessel 55	edge decorated (minimally molded and blue painted line only) whiteware small plate (unscalloped edge)
Vessel 56	Rockingham-glazed yellowware pitcher
Vessel 57	lamp globe (clear/lead glass, frosted exterior, ground blow-over-mold rim)
Vessel 58	salt glazed stoneware jug (hand turned)
Vessel 59	printed (red) whiteware cup
Vessel 60	printed (blue) whiteware saucer (?)

Vessel 61	painted (polychrome, large floral with green lined rim) whiteware saucer
Vessel 62	undecorated whiteware plate (approximately 8-8½" diameter) [similar to Vessel 5 which was impressed "DAVENPORT / GRANITE" with impressed anchor and year stamp for 1840)
Vessel 63	edge decorated (blue) whiteware platter (non-scalloped edge; polygonal/Gothic shape)
Vessel 64	painted (monochrome blue, large floral pattern with blue lined rim) whiteware saucer
Vessel 65	food jar? (clear/lead, wide mouth, approximately 1 ½"-2" diameter rim, rolled lip, badly melted
Vessel 66	edge decorated (blue) whiteware plate/small plate (scalloped edge)
Vessel 67	sponge decorated (yellow) painted (polychrome, peacock pattern?, London urn shape) whiteware cup
Vessel 68	painted (?) (flow blue) whiteware saucer/small plate
Vessel 69	painted (polychrome) whiteware cup (approximate 6" diameter)
Vessel 70	sponge decorated (yellow) whiteware saucer (burned)
Vessel 71	redware hand turned bowl (approximate 7" diameter base)
Vessel 72	indeterminate small vessel (clear/lead) (salt?)
Vessel 73	edge decorated (blue) whiteware saucer/small plate
Vessel 74	edge decorated (green) pearlware saucer/small plate (scalloped edge)
Vessel 75	undecorated yellowware hand turned small jug (handled)
Vessel 76	painted (monochrome blue, broad floral pattern) whiteware saucer [similar to Vessel 42]
Vessel 77	painted (polychrome, earth-tone colors, large floral pattern, blue lined edge, blue stemmed) whiteware saucer [impressed backstamp "ADAMS"] **[**Vessel 39 crossmends with this vessel.]
Vessel 78	indeterminate jar (clear/lead, approximate 1 ½" diameter base, wide mouth)
Vessel 79	vial (aqua, round, folded exterior lip, pontiled)
Vessel 80	printed (dark blue) pearlware cup
Vessel 81	printed (black) whiteware saucer/small plate
Vessel 82	undecorated (painted?) outflaring rim cup
Vessel 83	painted (polychrome, small floral pattern) whiteware saucer
Vessel 84	medicine/chemical bottle (aqua, concave base, approximate 2' x 1 ½" base, hand blown?, rolled/folded to exterior lip finish, pontiled)
Vessel 85	no vessel assigned
Vessel 86	medicine bottle (clear, concave base similar to Vessel 84, folded to exterior rim, very badly burned)
Vessel 87	sponge decorated (red and blue, rainbow pattern) whiteware saucer
Vessel 88	painted (polychrome, broad/large floral pattern) whiteware saucer
Vessel 89	Rockingham glazed yellowware indeterminate vessel [no rim present; may represent fragment of Vessel 56]
Vessel 90	edge decorated and embossed (green) whiteware plate (scalloped edge)
Vessel 91	painted polychrome small floral whiteware (Cornflower pattern)
Vessel 92	painted lined edge whiteware rim only saucer
Vessel 93	printed red whiteware scalloped edge saucer (same pattern as red/green wares; and may actually be red/green?)

Vessel 94	edge decorated red whiteware approximately 9” diameter scalloped edge plate
Vessel 95	edge decorated blue embossed whiteware scalloped edge plate
Vessel 96	edge decorated green embossed whiteware scalloped edge plate
Vessel 97	printed dark blue pearlware small plate
Vessel 98	painted polychrome overglaze porcelain saucer
Vessel 99	painted polychrome small floral green lined edge whiteware saucer
Vessel 100	painted polychrome large floral whiteware saucer
Vessel 101	painted polychrome small floral with green lined edge whiteware scalloped edge saucer
Vessel 102	painted polychrome small floral unlined rim whiteware saucer
Vessel 103	painted polychrome broad floral ocher hue whiteware
Vessel 104	printed red and green whiteware scalloped edge saucer
Vessel 105	printed red and green whiteware London Urn shape embossed backstamp stylized ”3”? cup
Vessel 106	painted polychrome small floral whiteware London Urn shape unlined rim cup
Vessel 107	painted polychrome ocher hues whiteware cup [mate with Vessel 103]
Vessel 108	redware interior shelf for lid hand turned jar
Vessel 109	wine bottle (dark green/black, round, applied shoulder seal, applied string lip finish)
Vessel 110	indeterminate tableware (clear/lead, wheel engraved decoration) [possibly an oil lamp font?)
Vessel 111	indeterminate bottle (clear/lead, burned)
Vessel 112	undecorated whiteware approximately 8” diameter plate
Vessel 113	painted polychrome whiteware saucer
Vessel 114	salt/Albany slipped stoneware approximately 10” diameter hand turned jar
Vessel 115	edge decorated red and molded whiteware scalloped edge small plate
Vessel 116	edge decorated blue and molded whiteware scalloped edge small plate
Vessel 117	painted flow blue lined rim whiteware gothic shape cup
Vessel 118	painted flow blue lined edge whiteware plate
Vessel 119	sponge decorated red whiteware saucer
Vessel 120	sponge decorated blue whiteware saucer

APPENDIX V

MISCELLANEOUS ARTIFACT TABLES

Table V.1

Detailed Artifact Summary by Functional Category

Artifacts By Functional Groups

1. Foodways Service		
antler	handle	1
2-prong antler handled	serving fork	1
brass/copper	shaker top	1
ironstone	sherds	2
pearlware	sherds	40
porcelain	sherds	76
whiteware	sherds	1065
yellowware	sherds	6
bone-handled	table knife	1
tanged (flat)	table knife	1
tanged (rat-tail)	table knife	1
clear/lead	tableware	1
clear/lead	tableware glass	13
iron	teaspoon	1
2. Foodways Storage and Preparation		
clear/lead	container glass	2
iron	dutch oven lid	2
iron	hilt for fork/knife	1
iron	kitchen utensil handle	1
iron	serving spoon	1
earthenware	sherds	9
stoneware	sherds	20
whiteware	sherds	7
yellowware	sherds	30
3. Foodways Remains		
	bone	817
	eggshell	31
	peach pit	1
4. Personal		
faceted	bead	1
aqua	container glass	63
clear	container glass	21
clear/lead	container glass	7
dark green/black	container glass	31
porcelain	doll leg	1
aqua	glass	9
faceted	glass bead	1
brass	jewelry?	1
bone	lice comb	1
stoneware	marble	1
kaolin (ball clay)	pipe bowl	3
kaolin (ball clay)	pipe stem	1
copper	spectacle frame	2
brass	watch chain fob	1
5. Clothing		
brass	buckle	1
iron	buckle	3
bone (sew through)	button	11
brass (loop shank)	button	10
iron (loop shank)	button	1
iron (sew through)	button	2
milk glass (sew through)	button	1
shell (sew through)	button	6
iron	button/disk	1
brass	pin	4
leather	shoe	2
6. Household Furnishings		
clear/lead	chimney glass	1
brass	screw	1
creamware	sherds	1
whiteware	sherds	2
iron	upholstery tack	1
machine-cut	upholstery tack	1
7. Architecture		
	brick	2
	brick/daub	49
iron	concretions (nails?)	2
	daub	124
iron	hinge	1
forged	hook	1
forged	nail	2
machine-cut	nail	189
iron	rivet	1
	sandstone	2
iron	sheet metal	1
iron	sheet metal (thin)	4
iron	staple	2
aqua	window glass	32
8. Labor and Activities		
iron	ax	1
	bifacial thinning flake	1
	broken flakes	8
iron	cap or lid	1
iron	chain links	1
	charcoal	194
iron	cow bell	1
	fire cracked rock	4
	gun flint	2
iron	half circle sheet metal	1
iron	horseshoe	1
lead	musket ball	2
iron	needle?	3
iron	pail handle	1
iron	pail handle/wire	1
	percussion cap	1
	prehistoric lithics	17
iron	scissors	2
	sheet metal/can fragments	4
iron	singletree hook	1
pewter	spout?	1
iron	stirrup	1
	straight pin	12
iron	strap	4
iron	strap with nails	1
slate	stylus	3
brass	thimble	2
iron	tubing	1
iron	unidentified	14
lead	unidentified	1
	whetstone	1
copper	wire	1
iron	wire	8
iron	wire/pin	2
	worked iron	2
9. Indeterminate		
burned	container glass?	2
aqua	glass	1
clear and white layered	glass	1
	metal concretions	2
	mussel shell	25
	terrestrial snail shell	7

Table V.2

Ceramic Vessels by Ware

		Sherd Count		Vessel Count	
creamware					
	chamber pot lid			1	
	sherds	1			
		1	**0.1%**	**1**	**1.1%**
ironstone					
	serving vessel			1	
	sherds	2			
		2	**0.2%**	**1**	**1.1%**
pearlware					
	cup			1	
	plate (small)			2	
	saucer			1	
	sherds	40			
		40	**3.4%**	**4**	**4.3%**
porcelain					
	cup			2	
	saucer			2	
	sherds	76			
		76	**6.4%**	**4**	**4.3%**
whiteware					
	chamber pot			1	
	cup			18	
	plate			16	
	plate (small)			12	
	platter			1	
	saucer			32	
	sherds	1074			
	teapot/sugarbowl lid			1	
	waster bowl			1	
		1074	**90.0%**	**82**	**89.1%**
Grand Total		**1193**		**92**	

Table V.3

Ceramics (Sherd Counts) by Ware and Decorations

		Number of Sherds		
creamware				
	undecorated	1		
			1	**0.1%**
ironstone				
	relief decorated	2		
			2	**0.2%**
pearlware				
	edge decorated	4		
	painted	14		
	printed	10		
	undecorated	12		
			40	**3.4%**
porcelain				
	undecorated	12		
	painted	61		
	relief decorated	3		
			76	**6.4%**
whiteware				
	undecorated	445		
	edge decorated	143		
	edge decorated (painted/lined only	9		
	painted	264		
	printed	162		
	relief decorated	1		
	sponged	39		
	annular decorated	11		
			1074	**90.0%**
Grand Total			**1193**	

Table V.4

Ceramic Vessels by Decoration

Ceramic Decorations

		Sherd Count		Vessel Count	
annular decorated					
	waster bowl			1	
	sherds	11		0	
		11	0.9%	1	1.1%
edge decorated					
	plate (small)			7	
	sherds	4		0	
	sherds	143		0	
	plate			11	
	platter			1	
	plate (small)			1	
		147	12.3%	20	21.7%
edge decorated (painted/lined only)					
	sherds	9		0	
	plate (small)			2	
	saucer			1	
	plate			1	
	cup			2	
		9	0.8%	6	6.5%
painted					
	plate			1	
	saucer			2	
	saucer			19	
	cup			8	
	cup			1	
	plate (small)			1	
	saucer			1	
	sherds	14		0	
	sherds	61		0	
	sherds	264		0	
		339	28.4%	33	35.9%
printed					
	plate (small)			2	
	cup			4	
	plate (small)			1	
	sherds	10		0	
	cup			1	
	saucer			5	
	sherds	162		0	
		172	14.4%	13	14.1%
relief decorated					
	sherds	1		0	
	sherds	2		0	
	sherds	3		0	
	serving vessel			1	
	cup			1	
	cup			1	
		6	0.5%	3	3.3%
sponged					
	cup			2	
	teapot/sugarbowl lid			1	
	sherds	39		0	
	saucer			7	
		39	3.3%	10	10.9%
undecorated					
	cup			1	
	sherds	12		0	
	sherds	1		0	
	chamber pot			1	
	sherds	12		0	
	sherds	445		0	
	chamber pot lid			1	
	plate			3	
		470	39.4%	6	6.5%
Grand Total		1193		92	

APPENDIX VI

FAUNAL REPORT
DR. TERRANCE MARTIN
ILLINOIS STATE MUSEUM

ANIMAL REMAINS FROM THE JONES/HILLERMAN SITE (11MX306), MASSAC COUNTY, ILLINOIS

Terrance J. Martin
Illinois State Museum

The analysis of the faunal assemblage from the Jones/Hillerman Site provides the opportunity to consider foodways associated with the initial settlement of an area that once aspired to be a principal port of entry for the Ohio River at the community of Hillerman. Squatters may have been at the site during the 1820s, but Jesse Jones and with his wife Margaret were the first people identified from historical documents as owning the 40-acre tract from 1838 until 1841. Unfortunately, next to nothing is known about their background and personal histories. Jones sold the property to Lorenzo Hillerman, William Parker, and Thomas Irwin, men who resided in the adjacent small town of Hillerman and were known as merchants and traders. Once again, very little personal information is available for these men.

The archaeological features and artifacts from the Jones/Hillerman Site suggest that it was a short-term farmstead or rural house site that was established during the 1830s and abandoned during the middle 1840s. Beyond documenting the basic subsistence resources that were consumed by the inhabitants, the faunal assemblage was analyzed in order to gain insights into more subtle and interrelated aspects of the occupation. For example, do the animal remains reflect any one regional cuisine such as an Upland South dietary pattern in which the consumption of pork is one characteristic? Does the recovered sample permit a perspective on the economic status of the former inhabitants in relation to other households in the community? Does the faunal collection indicate that people living at the site had ready access to local markets, or does the presence of wild animals suggest that site inhabitants had to rely on local resources? What impact do food preferences have on the faunal assemblage in contrast to market availability and necessity, and do economic necessities affect perceptions of any idealized foodway patterns (Peres 2007)? Are there indications of domestic or commercial activities; working class or merchant class; and/or ethnic characteristics?

METHODS

Animal remains from the Jones/Hillerman site were examined at the Illinois State Museum's Research and Collections Center where an extensive collection of modern vertebrate skeletons and freshwater mussel shells are available for reference. Information for each identified specimen and each lot of unidentified specimens was entered on tags that were printed on acid-free, archive-quality paper. Specimens and accompanying tags were placed within 2 mil or 4 mil polyethylene zipper bags. Included on the specimen tags is information on archaeological provenience, animal taxon represented, anatomical element, side, portion of element, condition of epiphyseal closure (if present), completeness, weight of the specimen in grams, natural modifications (e.g., carnivore- and/or rodent-gnawing), and cultural modifications (e.g., burning and cut marks). Standard lengths of fish were estimated for each identified bone

by referring to bones from modern fish of known size in the comparative collection. Single specimen counts were tallied in the case of refitted broken specimens as well as rejoined epiphyses and shafts. All information was then entered into computer files in order to facilitate the analysis.

Summary calculations are presented in tables and include the number of identified specimens (NISP), minimum number of individuals (MNI) per taxon, total weight of specimens per taxon in grams, and biomass (in kg) for each taxon. Scientific and common names for animals follow the Integrated Taxonomic Information System (ITIS) website. Estimates of MNI were calculated from individual features (maximum distinction approach [Grayson 1973], assuming specimens from one individual do not occur in multiple features or other contexts), and from the temporal component at large (minimum distinction approach [Grayson 1973], assuming specimens from one individual could occur in multiple contemporaneous features or other contexts) based on element, symmetry, element portion, and biological age or body size. Biomass estimates were derived from allometric scaling. As described by Reitz and Scarry (1985:18), "the weight of the archaeological bone is used in an allometric formula [see Reitz and Scarry 1985:67] to predict the quantity of biomass for the skeletal mass recovered rather than the total original weight of the individual animal represented by the recovered bone." This approach avoids the problem of basing meat estimates on MNI and determining whether the meat from entire animals was consumed at the site from which the archaeological sample was acquired. Despite the problems inherent in the various techniques used to estimate biomass and usable or edible meat, the interpretive value of such measures are the *relative* importance of the various taxa rather than the *absolute* quantities.

For historical sites, perhaps as significant as identifying various species in a faunal assemblage is distinguishing skeletal portions for the larger mammals from which meat was procured. Different meat preferences among individual persons and social groups, different values of various animals and secondary butchering units, changes in butchering practices over time, and differences in butchering practices between rural and urban settings can contribute to interpretations of socioeconomic status and prosperity. These topics have been discussed by various authors (e.g., Hattori and Kosta 1990; Price 1985; Rothschild and Balkwill 1993; and Schulz and Gust 1983). The large mammal remains recovered from the Jones/Hillerman site were tabulated by skeletal portion for each species.

SPECIES ACCOUNTS

A grand total of 812 animal remains were recovered from the site. Sample sizes from the various areas and features are presented in Table 1, where Feature 3 (a large shallow basin of unkown function) can be seen as contributing the greatest proportion of the overall faunal assemblage by count (73.5%) and by combined specimen weight (50.3%). Just over 67% of the specimens from that feature are burned or calcined, but rodent and carnivore damage is insignificant. The species composition of the entire site is shown in Table 2 where the total number of specimens identified more precisely than class, a total of 189 specimens from 12 vertebrate taxa and three freshwater mussel species, represents just over 23% of the total assemblage by count and nearly 66% by weight. Mammals are the dominant class in terms of

number of specimens, total specimen weight, and number of taxa (7). Birds (3 taxa), fish (2 taxa), amphibians (1 taxon), freshwater mussels (3 species), and aquatic gastropods are present, but in very small quantities overall. The species composition and relative quantities by individual feature are presented in Table 3.

Mammals

Mammal bones and teeth account for 86.3% of all specimens by count and 92.4% by specimen weight. The significance of this class to the overall subsistence pattern is indicated by the finding that the minimum number of 13 individuals (68.4% of the total site vertebrate MNI) contributed approximately 99% of the total estimated biomass from all identified taxa.

Economically, the most significant mammal was swine, which contributed 60.0% of all identified specimens and 63.8% of the identified mammal specimens. Biomass from swine represents 67.1% from all identified mammals and 66.5% from all identified taxa overall. Because of the restricted temporal range of the overall site occupation along with nearly 90% of all animal remains originating from only two features (Feature 3 and 5), calculation of MNI is probably most accurate based on consideration of the total site assemblage (i.e., minimum distinction approach). A minimum of five individuals was calculated on the basis of the presence of three isolated right upper first molars (one from Feature 7 and two from Feature 1), a right maxilla with a first molar (from Feature 3), plus a tibia from a unique juvenile individual (from Feature 3). If MNI are calculated separately for each feature and then summed (maximum distinction approach, assuming that bones from individuals will not occur in more than one feature), a total of 13 individual swine can be accounted for. The presence of deciduous teeth, unerupted permanent teeth, worn permanent teeth, and postcranial bones having both open and fused epiphyses, indicate that individuals of different biological ages are present. In terms of anatomical representation, 70.8% of all swine specimens consist of cranial fragments, isolated teeth, and foot bones (Table 4). The most under-represented skeletal portions are vertebrae (only two fragments) and ribs (none identified), although approximately 20 mid-body rib fragments from unidentified large and medium/large mammals were too fragmentary to make definitive species identifications between swine and white-tailed deer. It is unlikely that any of the rib fragments would be from sheep or goats since no other sheep or goat specimens were identified from the site. These proportions are generally similar to those presented for the Widow Harris Site, an early to mid-19th-century Ozark farmstead in southeastern Missouri where a major focus of the family subsistence pattern was the processing and consumption of swine utilizing smokehouses (Price 1985:47). A proximal humerus shaft fragment from Feature 3 was chopped with an ax or cleaver, but none of the other swine specimens show obvious signs of dismemberment or butchering.

Cattle is the next most significant animal in terms of contributed biomass (22.6% from identified mammals; 22.4% from all identified animals), despite being represented by only five specimens from a minimum of two individuals. Cattle specimens from Feature 1 consisted of two incisor teeth and a left distal humerus shaft from a calf (which was chopped); Feature 3 yielded a fragment of a left astragalus, and Feature 6 contained the dorsal portion of a lumbar vertebra. Consistent with the site's early to mid-19th century temporal setting and location away

from urban markets, none of the cattle bones were sawed. The presence of teeth may also indicate that the cattle was raised locally.

Although 41 specimens were identified as white-tailed deer, this may impart an inflated impression of the animal's importance. Deer remains were encountered in four of the six features, but the deer remains from Feature 2 consist of 32 fragments of an antler. Among the pieces is a left naturally shed burr, indicative of the period of February through March, the time when deer shed their antlers in Illinois (Hoffmeister 1989:318). Another antler fragment came from Feature 5. Deer and elk antlers provided raw material for tools and tool handles for early settlers, examples being found at several early 19th-century Illinois sites (Dunning 2000:35; Martin 2006:3; Mazrim 2008:119; McCorvie 1987:207, 219; McCorvie et al.:178, 196;). The remaining bones consist of a right posterior mandible fragment; a lumbar vertebra fragment; a left distal, lateral humerus shaft; and a right distal, posterior humerus shaft from Feature 3; a left proximal anterior humerus shaft and a distal second phalanx from Feature 5; and a right calcaneus from Feature 7. A minimum of one individual could account for all seven bones and the numerous antler fragments. When antler is excluded from dietary consideration, deer contributes only 6.2% of the biomass from all identified mammals and 6.1% of the biomass from all vertebrates.

Medium-sized mammals are represented by two species, with all specimens coming from Feature 3. Two opossum bones consist of a right proximal ulna with an open epiphysis, and the greater portion of a left femur shaft. Fourteen raccoon bones represent at least two individuals, as indicated by acetabulum portions of two left innominate bones and proximal and mid-shaft portions of two right ulnae.

Small-sized mammals are limited to only three specimens. The ilium portion of a right innominate bone from an eastern cottontail was recovered from Feature 1. Two eastern grey squirrel bones–a left distal humerus and a left femur mid-shaft–were identified in the collection from Feature 3.

Birds

Although a total of 70 avian remains were encountered, 52 of these are eggshell fragments (probably from red junglefowl [domestic chicken]) that were found in Features 5 and 3. Identified red junglefowl bones also came from Feature 3 (two right proximal and one left distal tarsometatarsi) and Feature 5 (a right radius). A right distal tibiotarsus from Feature 3 is from a small individual turkey. A mid-shaft of an ulna from Feature 3 is also from a gallinaceous bird, but it is uncertain whether it is from a large chicken or a small turkey. Interestingly, no other avian species such as waterfowl are represented. Unidentified bird bones also occurred in Features 1 and 7.

Fish and Amphibians

There are only three identified bones from these two classes. The frog bone is a small tibio-fibula from Feature 3. The identified fish bones are both from catfish, and both are also from Feature 3. A 43-44-cm-long (standard length) flathead catfish is represented by a urohyal.

The middle portion of a pectoral spine from a slightly larger (circa 50-55-cm-long) blue catfish or channel catfish was also recovered from the same feature. Seven unidentified fish rib/ray/spine fragments were also found in Feature 3. Unless the tributary stream was much larger when the Jones/Hillerman site was occupied, the fish were most likely taken from the Ohio River.

Freshwater Mussels and Gastropods

Freshwater mussel shells are restricted to two features and a surface context. The identified bivalves consist of a pink heelsplitter from Feature 3, a spike from Feature 7, and a ring pink from surface contexts. A total of 19 unidentified mussel shell fragments were associated with Feature 3. Both the pink heelsplitter and spike are widespread throughout the Midwest. Whereas the spike can occur in small, medium, or large streams in mud or gravel substrate, the pink heelsplitter is more often found in medium or large rivers in mud, sand, or gravel substrates (Cummings and Mayer 1992:68, 124). The ring pink is a large river species that prefers gravel or sand substrates and is restricted to the Ohio and Wabash Rivers (Cummings and Mayer 1992:112-113). None of the shells have modifications suggestive of how they were utilized by the inhabitants of the site.

Aquatic gastropods were found among the animal remains in Features 3, 4, and 5. Whether these were accidental inclusions or if they had been collected as curios is uncertain. No perforations or other modifications occur on the snail shells.

DISCUSSION

Despite the early 19th-century setting for the Jones/Hillerman Site, the site's faunal assemblage reflects the importance of domesticated animals in the diet. Several local wild animals are present, but these appear to have supplemented pork, beef, and poultry. The recovery of bird eggshell fragments suggests that domesticated chickens were probably kept locally for their eggs. The exploitation of local aquatic resources is indicated by the presence of catfish and freshwater mussels, although the manner in which the bivalves were utilized is unknown. Although certain trends are apparent, the modest-sized faunal collection prohibits definitive statements about the local subsistence pattern that may be represented.

In an attempt to glean as much information as possible from the available faunal collection, alternative approaches to estimating human dietary contributions were explored. Dietary contributions of the animals represented in a faunal assemblage will vary depending on the technique used to generate secondary data. The quantities of biomass shown in Table 2 are derived from individual specimen weights. The older and formerly standard approach to estimating dietary contributions from archaeological collections entails estimating dietary contributions of <u>whole</u> animals using calculated MNIs for the site and usable meat weights per individual. Because it is most likely that the domesticated animals represented in the Jones/Hillerman faunal assemblage were obtained locally as whole animals, and not purchased as butchering units from a meat market, use of this quantitative approach seems logical. As Reitz and Wing (1999:171) note, both kinds of secondary data (usable meat from whole animals;

biomass calculated from individual specimen weights) are more subjective than the primary data they are generated from. The quantitative technique based on whole animals has fallen out of favor since it has many problems, including: (a) the confidence one places in small samples, (b) the confidence one places in the MNI estimates for the various animal taxa, (c) the assumption that whole animals were consumed (and what tissues and organs were considered "edible" by the human group that is being studied), and (d) the confidence one places in the "average" meat weights that are used for the calculations, since standard sizes of animals are not constant through time and over space (see Reitz and Wing 1999:226-230). It is also apparent that (e) meat yields estimated for the larger bodied animals are likely to be more imprecise than those for smaller-bodied animals, and as a consequence, the meat yields calculated for the larger animals are probably overestimates. Nonetheless, these alternate figures are presented in Table 5, where the presence of subadult swine and cattle are taken into account for the usable meat weights.

The most significant difference in the estimated dietary contributions by species is the relative contributions from swine and cattle. Individual specimen weights yield a more robust contribution from swine (66.0%) in contrast to whole animal weight (48.3%). Cattle dietary contribution shows the reverse trend with only 22.4% from specimen weights, and 44.1% from whole animal weight. Surprisingly, dietary contributions from wild animals, birds, and fish are remarkably similar despite the different approaches.

Whose refuse was recovered at the Jones/Hillerman Site? The inhabitants may have been squatters, the family of Jesse Jones, or a family associated with Lorenzo Hillerman, William Parker, or Thomas Irwin. Although the region of origin of the site inhabitants is unknown, the moderate sample seems to be consistent with the Upland South tradition that became widespread as the trans-Appalachian frontier was expanding into southern Illinois during the early nineteenth century (Meyer 2000:19-41; 165). This is typified by a preference for corn, hogs, and a heavy reliance on wild game. The faunal assemblage seems consistent with foodways that are generally characteristic of the region in that swine were apparently raised and processed at the site with skeletal portions dominated by cranial fragments, isolated teeth, and foot bones. Cattle and domesticated chickens were also available to the site inhabitants, but their remains are more scarce. White-tailed deer were hunted, as were raccoon, opossum, gray squirrel, and eastern cottontail. Deer antlers were raw material for tool handles and other artifacts. Whereas pork was most important in Upland South households, cattle were not absent altogether since cattle were raised for dairy products except cheese. This is more comparable than either the Midland or the Northern subsistence traditions that have been scrutinized in more detail for another study of early nineteenth-century Illinois by referring to U.S. Census reports and agricultural schedules (C. Martin and T. Martin, 2010). Of course, households that had limited access to markets due to geographic isolation or low economic status may exhibit aspects that may complicate their adherence to models of regional subsistence patterns (Peres 2008). For the Jones/Hillerman site, consideration of the artifact assemblage in conjunction with the faunal assemblage should provide insights into such nuances that must be taken into account for any site.

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Table 1
Sample sizes of animal remains from various contexts at the Jones/Hillerman site (11MX306)

Provenience	NSP[1]	% NSP	NSP Wt (g)	% NSP by Wt.	NSP Burned or Calcined	NSP Carnivore - gnawed	NSP Rodent-gnawed
Surface	2	.2	31.1	2.1	0	0	0
Feature 1	30	3.7	228.7	15.4	1	1	0
Feature 2	37	4.6	150.9	10.2	0	0	0
Feature 3	597	73.5	750.3	50.5	403	5	1
Upper fill	(320)		(312.8)		(214)	(2)	(1)
Lower fill	(154)		(157.8)		(131)	(0)	(0)
All other	(123)		(279.7)		(58)	(3)	(0)
Feature 4	2	.2	5.6	.4	0	0	0
Feature 5	128	15.8	206.3	13.9	44	1	0
Feature 6	1	.1	48.8	3.3	0	0	0
Feature 7	14	1.7	63.4	4.3	1	1	0
Grand Totals	812	99.8	1,485.5	100.1	449	8	1

[1]Number of specimens.

Table 2
Species composition of animal remains from the Jones/Hillerman site (11MX306)

	NISP[1]	MNI[2]	NISP Wt (g)	Biomass (kg)[3]
MAMMALS	**701**	**13**	**1,372.3**	**20.833**
Opossum, *Didelphis virginiana*	2	1	3.4	.079
Eastern cottontail, *Sylvilagus floridanus*	1	1	.7	.019
Eastern gray squirrel, *Sciurus carolinensis*	2	1	.5	.014
Raccoon, *Procyon lotor*	14	2	22.4	.432
Swine, *Sus scrofa*	113	5	556.9	8.789
White-tailed deer, *Odocoileus virginianus*	40	1	152.9	.809
Domestic cattle, *Bos taurus*	5	2	172.1	2.959
Unidentified very large mammal	1	–	17.3	.342
Unidentified large mammal	162	–	274.7	4.601
Unidentified medium/large mammal	332	–	162.6	2.591
Unidentified medium mammal	17	–	6.4	.140
Unidentified small mammal	12	–	2.4	.058
BIRDS	**70**	**3**	**12.6**	**.200**
Red junglefowl, *Gallus gallus*	4	2	2.7	.053
Turkey, *Meleagris gallopavo*	1	1	2.2	.042
Gallinaceous bird, Phasianidae	1	–	.4	.009
Unidentified medium/large bird	7	–	3.6	.065
Unidentified medium bird	5	–	1.9	.031
Unidentified bird eggshell fragments	52	–	1.8	–
AMPHIBIANS	**1**	**1**	**<.1**	–
Frog sp., *Bufo* sp.	1	1	<.1	–
FISH	**9**	**2**	**1.8**	**.045**
Catfish sp., *Ictalurus* sp.	1	1	.7	.014
Flathead catfish, *Pylodictis olivaris*	1	1	.2	.004

Table 2 (continued)

Unidentified fish	7	–	.9	.027
UNIDENTIFIED VERTEBRATA	**3**	**–**	**1.0**	**–**
BIVALVES	**22**	**3**	**73.7**	**–**
Spike, *Elliptio dilatata*	1	1	29.1	–
Ring pink, *Obovaria retusa*	1	1	24.9	–
Pink heelsplitter, *Potamilis alatus*	1	1	10.3	–
Unidentified mussel	19	–	9.4	–
GASTOPODS	**6**	**6**	**24.1**	**–**
Aquatic gastropods	6	6	24.1	–
Grand Totals	812	28	1,485.5	21.078
Totals, Identified below class	189	22	979.4	13.223
Percentage identified below class	23.2		65.9	62.7

[1]Number of identified specimens.
[2]Minimum number of individuals calculated from the site as a whole.
[3]Biomass in kg was calculated from total NISP weights from each separate context and then summed using allometric formulae presented by Reitz and Scarry (1985:67).

Table 3. Species composition by provenience for the Jones/Hillerman site

	Surface			Feature 1			Feature 2			Feature 3		
	NISP/ MNI[1]	NISP Wt (g)	Biomass (kg)[2]	NISP/ MNI	NISP Wt (g)	Biomass (kg)	NISP/ MNI	NISP Wt (g)	Biomass (kg)	NISP/ MNI	NISP Wt (g)	Biomass (kg)
MAMMALS												
Opossum	–	–	–	–	–	–	–	–	–	2/4	3.4	.079
Eastern cottontail	–	–	–	1/1	.7	.019	–	–	–	–	–	–
Eastern gray squirrel	–	–	–	–	–	–	–	–	–	2/1	.5	.014
Raccoon	–	–	–	–	–	–	–	–	–	14/21	22.4	.432
Swine	1/1	6.2	.136	10/3	104.6	1.728	3/2	36.8	.675	810/4	345.5	5.065
White-tailed deer	–	–	–	–	–	–	32/1	106.6	–	4/1	33.0	.612
Domestic cattle	–	–	–	3/2	106.7	1.759	–	–	–	1/1	16.6	.330
Unid. vlg, mammal	–	–	–	–	–	–	–	–	–	–	–	–
Unid. lg. mammal	–	–	–	15/–	16.3	.324	2/–	7.5	.161	83/–	121.1	1.972
Unid. med/lg mammal	–	–	–	–	–	–	–	–	–	330/–	160.9	2.546
Unid. med. mammal	–	–	–	–	–	–	–	–	–	17/–	6.4	.140
Unid. sm. mammal	–	–	–	–	–	–	–	–	–	12/–	2.4	.058
BIRDS												
Red junglefowl	–	–	–	–	–	–	–	–	–	3/2	2.3	.044
Turkey	–	–	–	–	–	–	–	–	–	1/1	2.2	.042
Gallinaceous bird	–	–	–	–	–	–	–	–	–	1/–	.4	.009
Unid. med/lg bird	–	–	–	–	–	–	–	–	–	7/–	3.6	.065
Unid. med. bird	–	–	–	1/–	.4	.009	–	–	–	1/–	<.1	–
Eggshell fragments	–	–	–	–	–	–	–	–	–	5/–	<.1	–

Table 3 (continued)

AMPHIBIAN												
Frog sp.	–	–	–	–	–	–	–	–	–	1/1	<.1	–
FISH												
Catfish sp.	–	–	–	–	–	–	–	–	–	1/1	.7	.014
Flathead catfish	–	–	–	–	–	–	–	–	–	1/1	.2	.004
Unid. fish	–	–	–	–	–	–	–	–	–	7/–	.9	.027
UNID. VERTEBRATE	–	–	–	–	–	–	–	–	–	3/–	1.0	–
BIVALVES												
Spike	–	–	–	–	–	–	–	–	–	–	–	–
Ring Pink	1/1	24.9	–	–	–	–	–	–	–	–	–	–
Pink Heelsplitter	–	–	–	–	–	–	–	–	–	1/1	10.3	–
Unid. mussel	–	–	–	–	–	–	–	–	–	19/–	9.4	–
GASTROPODS	–	–	–	–	–	–	–	–	–	**1/1**	**7.5**	–
Grand Totals	2/2	31.1	.136	30/6	228.7	3.839	37/3	150.9	.836	598/20	750.7	11.453

Table 4

Skeletal portions (NISP) for swine, white-tailed deer, and cattle by provenience from the Jones/Hillerman site

	Surface	Fea 1	Fea 2	Fea 3	Fea 5	Fea 6	Fea 7	Totals	% NISP
SWINE									
Cranial fragments	0	2	1	21	3	0	0	27	23.9
Isolated teeth	1	8	2	11	4	0	3	29	25.7
Vertebrae	0	0	0	2	0	0	0	2	1.8
Ribs	0	0	0	0	0	0	0	0	–
Proximal forequarter	0	0	0	14	1	0	1	16	14.2
Innominate bone	0	0	0	1	1	0	0	2	1.8
Proximal hindquarter	0	0	0	10	2	0	1	13	11.5
Foot	0	0	0	22	2	0	0	24	21.2
Totals	1	10	3	81	13	0	5	113	100.1
WHITE-TAILED DEER									
Cranial fragments	0	0	0	1	0	0	0	1	2.5
Antler fragments	0	0	32	0	1	0	0	33	82.5
Isolated teeth	0	0	0	0	0	0	0	0	–
Vertebrae	0	0	0	1	0	0	0	1	2.5
Ribs	0	0	0	0	0	0	0	0	–
Proximal forequarter	0	0	0	2	1	0	0	3	7.5
Innominate bone	0	0	0	0	0	0	0	0	–
Proximal hindquarter	0	0	0	0	0	0	0	0	–

Table 4 (continued)

Foot	0	0	0	0	1	0	1	2	5.0
Totals	0	0	32	5	3	0	1	40	100.0
CATTLE									
Isolated teeth	0	2	0	0	0	0	0	2	40.0
Vertebrae	0	0	0	0	0	1	0	1	20.0
Proximal forequarter	0	1	0	0	0	0	0	1	20.0
Foot	0	0	0	1	0	0	0	1	20.0
Totals	0	3	0	1	0	1	0	5	100.0

Table 5
Comparison of dietary contributions from vertebrate animal remains, bone weight allometry ("biomass") versus usable meat estimated from MNIs

	Biomass (kg)	% Biomass	MNI	Usable Meat (kg)	% Usable Meat
MAMMALS	**13.114**	**99.1**	**12**	**704.16**	**98.6**
Opossum, *Didelphis virginiana*	.079	.6	1	3.60	.5
Eastern cottontail, *Sylvilagus floridanus*	.019	.1	1	.81	.1
Eastern gray squirrel, *Sciurus carolinensis*	.014	.1	1	.45	.1
Raccoon, *Procyon lotor*	.432	3.3	2	7.20	1.0
Swine, *Sus scrofa*	8.739	66.0	4	344.70	48.3
White-tailed deer, *Odocoileus virginianus*	.872	6.6	1	32.40	4.5
Domestic cattle, *Bos taurus*	2.959	22.4	2	315.00	44.1
BIRDS	**.104**	**.8**	**3**	**7.20**	**1.0**
Red junglefowl, *Gallus gallus*	.053	.4	2	1.80	.3
Turkey, *Meleagris gallopavo*	.042	.3	1	5.40	.8
Gallinaceous bird, Phasianidae	.009	.1	–	–	–
FISH	**.018**	**.1**	**2**	**2.88**	**.4**
Catfish sp., *Ictalurus* sp.	.014	.1	1	1.44	.2
Flathead catfish, *Pylodictis olivaris*	.004	<.1	1	1.44	.2
Totals, Identified below class	13.236	100.0	17	714.24	100.0